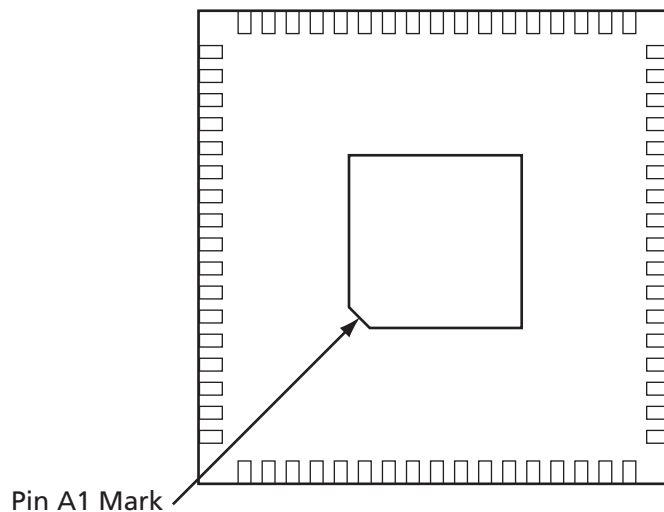




3 – Package Pin Assignments

68-Pin QFN



Note: This is the bottom view of the package.

Note

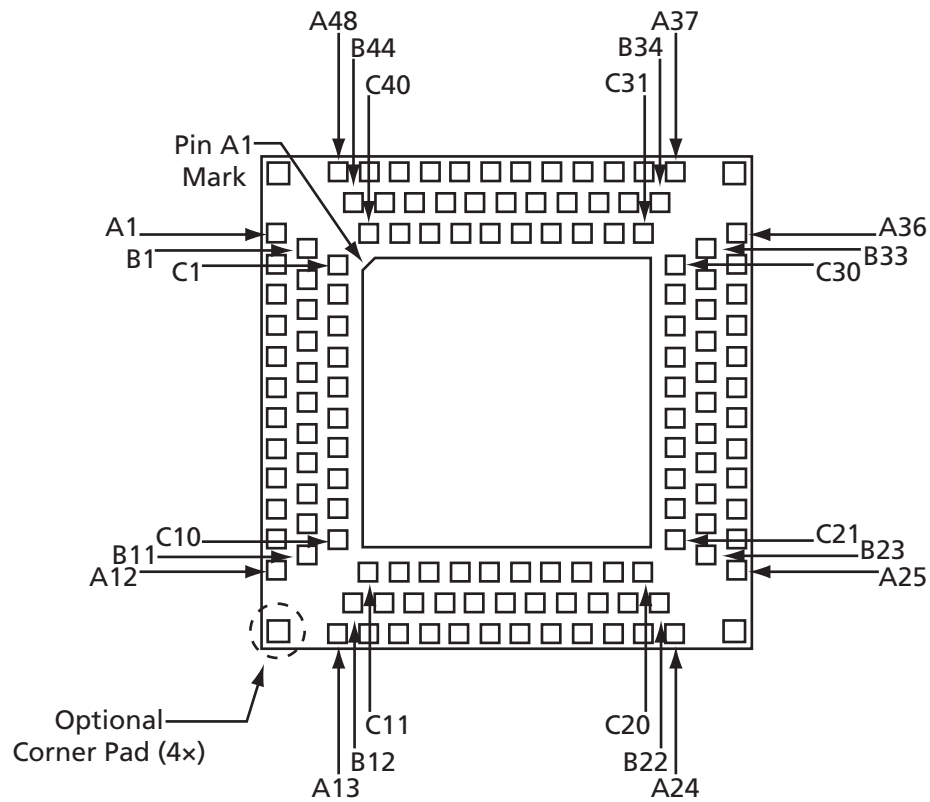
For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 68-Pin QFN | |
|------------|--------------------|
| Pin Number | A3P015 Function |
| 1 | IO82RSB1 |
| 2 | IO80RSB1 |
| 3 | IO78RSB1 |
| 4 | IO76RSB1 |
| 5 | GEC0/IO73RSB1 |
| 6 | GEA0/IO72RSB1 |
| 7 | GEB0/IO71RSB1 |
| 8 | V _{CC} |
| 9 | GND |
| 10 | V _{CC} B1 |
| 11 | IO68RSB1 |
| 12 | IO67RSB1 |
| 13 | IO66RSB1 |
| 14 | IO65RSB1 |
| 15 | IO64RSB1 |
| 16 | IO63RSB1 |
| 17 | IO62RSB1 |
| 18 | IO60RSB1 |
| 19 | IO58RSB1 |
| 20 | IO56RSB1 |
| 21 | IO54RSB1 |
| 22 | IO52RSB1 |
| 23 | IO51RSB1 |
| 24 | V _{CC} |
| 25 | GND |
| 26 | V _{CC} B1 |
| 27 | IO50RSB1 |
| 28 | IO48RSB1 |
| 29 | IO46RSB1 |
| 30 | IO44RSB1 |
| 31 | IO42RSB1 |
| 32 | TCK |
| 33 | TDI |
| 34 | TMS |
| 35 | V _{PUMP} |
| 36 | TDO |

| 68-Pin QFN | |
|------------|--------------------|
| Pin Number | A3P015 Function |
| 37 | TRST |
| 38 | V _{JTAG} |
| 39 | IO40RSB0 |
| 40 | IO37RSB0 |
| 41 | GDB0/IO34RSB0 |
| 42 | GDA0/IO33RSB0 |
| 43 | GDC0/IO32RSB0 |
| 44 | V _{CC} B0 |
| 45 | GND |
| 46 | V _{CC} |
| 47 | IO31RSB0 |
| 48 | IO29RSB0 |
| 49 | IO28RSB0 |
| 50 | IO27RSB0 |
| 51 | IO25RSB0 |
| 52 | IO24RSB0 |
| 53 | IO22RSB0 |
| 54 | IO21RSB0 |
| 55 | IO19RSB0 |
| 56 | IO17RSB0 |
| 57 | IO15RSB0 |
| 58 | IO14RSB0 |
| 59 | V _{CC} B0 |
| 60 | GND |
| 61 | V _{CC} |
| 62 | IO12RSB0 |
| 63 | IO10RSB0 |
| 64 | IO08RSB0 |
| 65 | IO06RSB0 |
| 66 | IO04RSB0 |
| 67 | IO02RSB0 |
| 68 | IO00RSB0 |



132-Pin QFN



Note: This is the top view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 132-Pin QFN | |
|-------------|-----------------|
| Pin Number | A3P030 Function |
| A1 | IO1RSB1 |
| A2 | IO81RSB1 |
| A3 | NC |
| A4 | IO80RSB1 |
| A5 | GEC0/IO77RSB1 |
| A6 | NC |
| A7 | GEB0/IO75RSB1 |
| A8 | IO73RSB1 |
| A9 | NC |
| A10 | V _{CC} |
| A11 | IO71RSB1 |
| A12 | IO68RSB1 |
| A13 | IO63RSB1 |
| A14 | IO60RSB1 |
| A15 | NC |
| A16 | IO59RSB1 |
| A17 | IO57RSB1 |
| A18 | V _{CC} |
| A19 | IO54RSB1 |
| A20 | IO52RSB1 |
| A21 | IO49RSB1 |
| A22 | IO48RSB1 |
| A23 | IO47RSB1 |
| A24 | TDI |
| A25 | TRST |
| A26 | IO44RSB0 |
| A27 | NC |
| A28 | IO43RSB0 |
| A29 | IO42RSB0 |
| A30 | IO40RSB0 |
| A31 | IO39RSB0 |
| A32 | GDC0/IO36RSB0 |
| A33 | NC |
| A34 | V _{CC} |
| A35 | IO34RSB0 |
| A36 | IO31RSB0 |

| 132-Pin QFN | |
|-------------|-----------------|
| Pin Number | A3P030 Function |
| A37 | IO26RSB0 |
| A38 | IO23RSB0 |
| A39 | NC |
| A40 | IO22RSB0 |
| A41 | IO20RSB0 |
| A42 | IO18RSB0 |
| A43 | V _{CC} |
| A44 | IO15RSB0 |
| A45 | IO12RSB0 |
| A46 | IO10RSB0 |
| A47 | IO09RSB0 |
| A48 | IO06RSB0 |
| B1 | IO02RSB1 |
| B2 | IO82RSB1 |
| B3 | GND |
| B4 | IO79RSB1 |
| B5 | NC |
| B6 | GND |
| B7 | IO74RSB1 |
| B8 | NC |
| B9 | GND |
| B10 | IO70RSB1 |
| B11 | IO67RSB1 |
| B12 | IO64RSB1 |
| B13 | IO61RSB1 |
| B14 | GND |
| B15 | IO58RSB1 |
| B16 | IO56RSB1 |
| B17 | GND |
| B18 | IO53RSB1 |
| B19 | IO50RSB1 |
| B20 | GND |
| B21 | IO46RSB1 |
| B22 | TMS |
| B23 | TDO |
| B24 | IO45RSB0 |

| 132-Pin QFN | |
|-------------|---------------------|
| Pin Number | A3P030 Function |
| B25 | GND |
| B26 | NC |
| B27 | IO41RSB0 |
| B28 | GND |
| B29 | GDA0/IO37RSB0 |
| B30 | NC |
| B31 | GND |
| B32 | IO33RSB0 |
| B33 | IO30RSB0 |
| B34 | IO27RSB0 |
| B35 | IO24RSB0 |
| B36 | GND |
| B37 | IO21RSB0 |
| B38 | IO19RSB0 |
| B39 | GND |
| B40 | IO16RSB0 |
| B41 | IO13RSB0 |
| B42 | GND |
| B43 | IO08RSB0 |
| B44 | IO05RSB0 |
| C1 | IO03RSB1 |
| C2 | IO00RSB1 |
| C3 | NC |
| C4 | IO78RSB1 |
| C5 | GEA0/IO76RSB1 |
| C6 | NC |
| C7 | NC |
| C8 | V _{CC1} B1 |
| C9 | IO69RSB1 |
| C10 | IO66RSB1 |
| C11 | IO65RSB1 |
| C12 | IO62RSB1 |
| C13 | NC |
| C14 | NC |
| C15 | IO55RSB1 |
| C16 | V _{CC1} B1 |

| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P030 Function |
| C17 | IO51RSB1 |
| C18 | NC |
| C19 | TCK |
| C20 | NC |
| C21 | V _{PUMP} |
| C22 | V _{JTAG} |
| C23 | NC |
| C24 | NC |
| C25 | NC |
| C26 | GDB0/IO38RSB0 |
| C27 | NC |
| C28 | V _{CCIB0} |
| C29 | IO32RSB0 |
| C30 | IO29RSB0 |
| C31 | IO28RSB0 |
| C32 | IO25RSB0 |
| C33 | NC |
| C34 | NC |
| C35 | V _{CCIB0} |
| C36 | IO17RSB0 |
| C37 | IO14RSB0 |
| C38 | IO11RSB0 |
| C39 | IO07RSB0 |
| C40 | IO04RSB0 |
| D1 | GND |
| D2 | GND |
| D3 | GND |
| D4 | GND |

| 132-Pin QFN | |
|-------------|---------------------|
| Pin Number | A3P060 Function |
| A1 | GAB2/IO00RSB1 |
| A2 | IO93RSB1 |
| A3 | V _{CC} B1 |
| A4 | GFC1/IO89RSB1 |
| A5 | GFB0/IO86RSB1 |
| A6 | V _{CC} PLF |
| A7 | GFA1/IO84RSB1 |
| A8 | GFC2/IO81RSB1 |
| A9 | IO78RSB1 |
| A10 | V _{CC} |
| A11 | GEB1/IO75RSB1 |
| A12 | GEA0/IO72RSB1 |
| A13 | GEC2/IO69RSB1 |
| A14 | IO65RSB1 |
| A15 | V _{CC} |
| A16 | IO64RSB1 |
| A17 | IO63RSB1 |
| A18 | IO62RSB1 |
| A19 | IO61RSB1 |
| A20 | IO58RSB1 |
| A21 | GDB2/IO55RSB1 |
| A22 | NC |
| A23 | GDA2/IO54RSB1 |
| A24 | TDI |
| A25 | TRST |
| A26 | GDC1/IO48RSB0 |
| A27 | V _{CC} |
| A28 | IO47RSB0 |
| A29 | GCC2/IO46RSB0 |
| A30 | GCA2/IO44RSB0 |
| A31 | GCA0/IO43RSB0 |
| A32 | GCB1/IO40RSB0 |
| A33 | IO36RSB0 |
| A34 | V _{CC} |
| A35 | IO31RSB0 |
| A36 | GBA2/IO28RSB0 |

| 132-Pin QFN | |
|-------------|----------------------|
| Pin Number | A3P060 Function |
| A37 | GBB1/IO25RSB0 |
| A38 | GBC0/IO22RSB0 |
| A39 | V _{CC} B0 |
| A40 | IO21RSB0 |
| A41 | IO18RSB0 |
| A42 | IO15RSB0 |
| A43 | IO14RSB0 |
| A44 | IO11RSB0 |
| A45 | GAB1/IO08RSB0 |
| A46 | NC |
| A47 | GAB0/IO07RSB0 |
| A48 | IO04RSB0 |
| B1 | IO01RSB1 |
| B2 | GAC2/IO94RSB1 |
| B3 | GND |
| B4 | GFC0/IO88RSB1 |
| B5 | V _{COM} PLF |
| B6 | GND |
| B7 | GFB2/IO82RSB1 |
| B8 | IO79RSB1 |
| B9 | GND |
| B10 | GEB0/IO74RSB1 |
| B11 | VMV1 |
| B12 | GEB2/IO70RSB1 |
| B13 | IO67RSB1 |
| B14 | GND |
| B15 | NC |
| B16 | NC |
| B17 | GND |
| B18 | IO59RSB1 |
| B19 | GDC2/IO56RSB1 |
| B20 | GND |
| B21 | GNDQ |
| B22 | TMS |
| B23 | TDO |
| B24 | GDC0/IO49RSB0 |

| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P060 Function |
| B25 | GND |
| B26 | NC |
| B27 | GCB2/IO45RSB0 |
| B28 | GND |
| B29 | GCB0/IO41RSB0 |
| B30 | GCC1/IO38RSB0 |
| B31 | GND |
| B32 | GBB2/IO30RSB0 |
| B33 | VMV0 |
| B34 | GBA0/IO26RSB0 |
| B35 | GBC1/IO23RSB0 |
| B36 | GND |
| B37 | IO20RSB0 |
| B38 | IO17RSB0 |
| B39 | GND |
| B40 | IO12RSB0 |
| B41 | GAC0/IO09RSB0 |
| B42 | GND |
| B43 | GAA1/IO06RSB0 |
| B44 | GNDQ |
| C1 | GAA2/IO02RSB1 |
| C2 | IO95RSB1 |
| C3 | V _{CC} |
| C4 | GFB1/IO87RSB1 |
| C5 | GFA0/IO85RSB1 |
| C6 | GFA2/IO83RSB1 |
| C7 | IO80RSB1 |
| C8 | V _{CC} B1 |
| C9 | GEA1/IO73RSB1 |
| C10 | GNDQ |
| C11 | GEA2/IO71RSB1 |
| C12 | IO68RSB1 |
| C13 | V _{CC} B1 |
| C14 | NC |
| C15 | NC |
| C16 | IO60RSB1 |

| 132-Pin QFN | |
|-------------|---------------------------------|
| Pin Number | A3P060 Function |
| C17 | IO57RSB1 |
| C18 | NC |
| C19 | TCK |
| C20 | VMV1 |
| C21 | V _{PUMP} |
| C22 | V _{JTAG} |
| C23 | V _{CC} I _{B0} |
| C24 | NC |
| C25 | NC |
| C26 | GCA1/IO42RSB0 |
| C27 | GCC0/IO39RSB0 |
| C28 | V _{CC} I _{B0} |
| C29 | IO29RSB0 |
| C30 | GNDQ |
| C31 | GBA1/IO27RSB0 |
| C32 | GBB0/IO24RSB0 |
| C33 | V _{CC} |
| C34 | IO19RSB0 |
| C35 | IO16RSB0 |
| C36 | IO13RSB0 |
| C37 | GAC1/IO10RSB0 |
| C38 | NC |
| C39 | GAA0/IO05RSB0 |
| C40 | VMV0 |
| D1 | GND |
| D2 | GND |
| D3 | GND |
| D4 | GND |

| 132-Pin QFN | |
|-------------|---------------------|
| Pin Number | A3P125 Function |
| A1 | GAB2/IO69RSB1 |
| A2 | IO130RSB1 |
| A3 | V _{CC} B1 |
| A4 | GFC1/IO126RSB1 |
| A5 | GFB0/IO123RSB1 |
| A6 | V _{CC} PLF |
| A7 | GFA1/IO121RSB1 |
| A8 | GFC2/IO118RSB1 |
| A9 | IO115RSB1 |
| A10 | V _{CC} |
| A11 | GEB1/IO110RSB1 |
| A12 | GEA0/IO107RSB1 |
| A13 | GEC2/IO104RSB1 |
| A14 | IO100RSB1 |
| A15 | V _{CC} |
| A16 | IO99RSB1 |
| A17 | IO96RSB1 |
| A18 | IO94RSB1 |
| A19 | IO91RSB1 |
| A20 | IO85RSB1 |
| A21 | IO79RSB1 |
| A22 | V _{CC} |
| A23 | GDB2/IO71RSB1 |
| A24 | TDI |
| A25 | TRST |
| A26 | GDC1/IO61RSB0 |
| A27 | V _{CC} |
| A28 | IO60RSB0 |
| A29 | GCC2/IO59RSB0 |
| A30 | GCA2/IO57RSB0 |
| A31 | GCA0/IO56RSB0 |
| A32 | GCB1/IO53RSB0 |
| A33 | IO49RSB0 |
| A34 | V _{CC} |
| A35 | IO44RSB0 |
| A36 | GBA2/IO41RSB0 |

| 132-Pin QFN | |
|-------------|----------------------|
| Pin Number | A3P125 Function |
| A37 | GBB1/IO38RSB0 |
| A38 | GBC0/IO35RSB0 |
| A39 | V _{CC} B0 |
| A40 | IO28RSB0 |
| A41 | IO22RSB0 |
| A42 | IO18RSB0 |
| A43 | IO14RSB0 |
| A44 | IO11RSB0 |
| A45 | IO07RSB0 |
| A46 | V _{CC} |
| A47 | GAC1/IO05RSB0 |
| A48 | GAB0/IO02RSB0 |
| B1 | IO68RSB1 |
| B2 | GAC2/IO131RSB1 |
| B3 | GND |
| B4 | GFC0/IO125RSB1 |
| B5 | V _{COM} PLF |
| B6 | GND |
| B7 | GFB2/IO119RSB1 |
| B8 | IO116RSB1 |
| B9 | GND |
| B10 | GEB0/IO109RSB1 |
| B11 | VMV1 |
| B12 | GEB2/IO105RSB1 |
| B13 | IO101RSB1 |
| B14 | GND |
| B15 | IO98RSB1 |
| B16 | IO95RSB1 |
| B17 | GND |
| B18 | IO87RSB1 |
| B19 | IO81RSB1 |
| B20 | GND |
| B21 | GNDQ |
| B22 | TMS |
| B23 | TDO |
| B24 | GDC0/IO62RSB0 |

| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P125 Function |
| B25 | GND |
| B26 | NC |
| B27 | GCB2/IO58RSB0 |
| B28 | GND |
| B29 | GCB0/IO54RSB0 |
| B30 | GCC1/IO51RSB0 |
| B31 | GND |
| B32 | GBB2/IO43RSB0 |
| B33 | VMV0 |
| B34 | GBA0/IO39RSB0 |
| B35 | GBC1/IO36RSB0 |
| B36 | GND |
| B37 | IO26RSB0 |
| B38 | IO21RSB0 |
| B39 | GND |
| B40 | IO13RSB0 |
| B41 | IO08RSB0 |
| B42 | GND |
| B43 | GAC0/IO04RSB0 |
| B44 | GNDQ |
| C1 | GAA2/IO67RSB1 |
| C2 | IO132RSB1 |
| C3 | V _{CC} |
| C4 | GFB1/IO124RSB1 |
| C5 | GFA0/IO122RSB1 |
| C6 | GFA2/IO120RSB1 |
| C7 | IO117RSB1 |
| C8 | V _{CC} B1 |
| C9 | GEA1/IO108RSB1 |
| C10 | GNDQ |
| C11 | GEA2/IO106RSB1 |
| C12 | IO103RSB1 |
| C13 | V _{CC} B1 |
| C14 | IO97RSB1 |
| C15 | IO93RSB1 |
| C16 | IO89RSB1 |

| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P125 Function |
| C17 | IO83RSB1 |
| C18 | V _{CC} B1 |
| C19 | TCK |
| C20 | VMV1 |
| C21 | V _{PUMP} |
| C22 | V _{JTAG} |
| C23 | V _{CC} B0 |
| C24 | NC |
| C25 | NC |
| C26 | GCA1/IO55RSB0 |
| C27 | GCC0/IO52RSB0 |
| C28 | V _{CC} B0 |
| C29 | IO42RSB0 |
| C30 | GNDQ |
| C31 | GBA1/IO40RSB0 |
| C32 | GBB0/IO37RSB0 |
| C33 | V _{CC} |
| C34 | IO24RSB0 |
| C35 | IO19RSB0 |
| C36 | IO16RSB0 |
| C37 | IO10RSB0 |
| C38 | V _{CC} B0 |
| C39 | GAB1/IO03RSB0 |
| C40 | VMV0 |
| D1 | GND |
| D2 | GND |
| D3 | GND |
| D4 | GND |

| 132-Pin QFN | |
|-------------|---------------------|
| Pin Number | A3P250 Function |
| A1 | GAB2/IO117UPB3 |
| A2 | IO117VPB3 |
| A3 | V _{CC} B3 |
| A4 | GFC1/IO110PDB3 |
| A5 | GFB0/IO109NPB3 |
| A6 | V _{CC} PLF |
| A7 | GFA1/IO108PPB3 |
| A8 | GFC2/IO105PPB3 |
| A9 | IO103NDB3 |
| A10 | V _{CC} |
| A11 | GEA1/IO98PPB3 |
| A12 | GEA0/IO98NPB3 |
| A13 | GEC2/IO95RSB2 |
| A14 | IO91RSB2 |
| A15 | V _{CC} |
| A16 | IO90RSB2 |
| A17 | IO87RSB2 |
| A18 | IO85RSB2 |
| A19 | IO82RSB2 |
| A20 | IO76RSB2 |
| A21 | IO70RSB2 |
| A22 | V _{CC} |
| A23 | GDB2/IO62RSB2 |
| A24 | TDI |
| A25 | TRST |
| A26 | GDC1/IO58UDB1 |
| A27 | V _{CC} |
| A28 | IO54NDB1 |
| A29 | IO52NDB1 |
| A30 | GCA2/IO51PPB1 |
| A31 | GCA0/IO50NPB1 |
| A32 | GCB1/IO49PDB1 |
| A33 | IO47NSB1 |
| A34 | V _{CC} |
| A35 | IO41NPB1 |
| A36 | GBA2/IO41PPB1 |

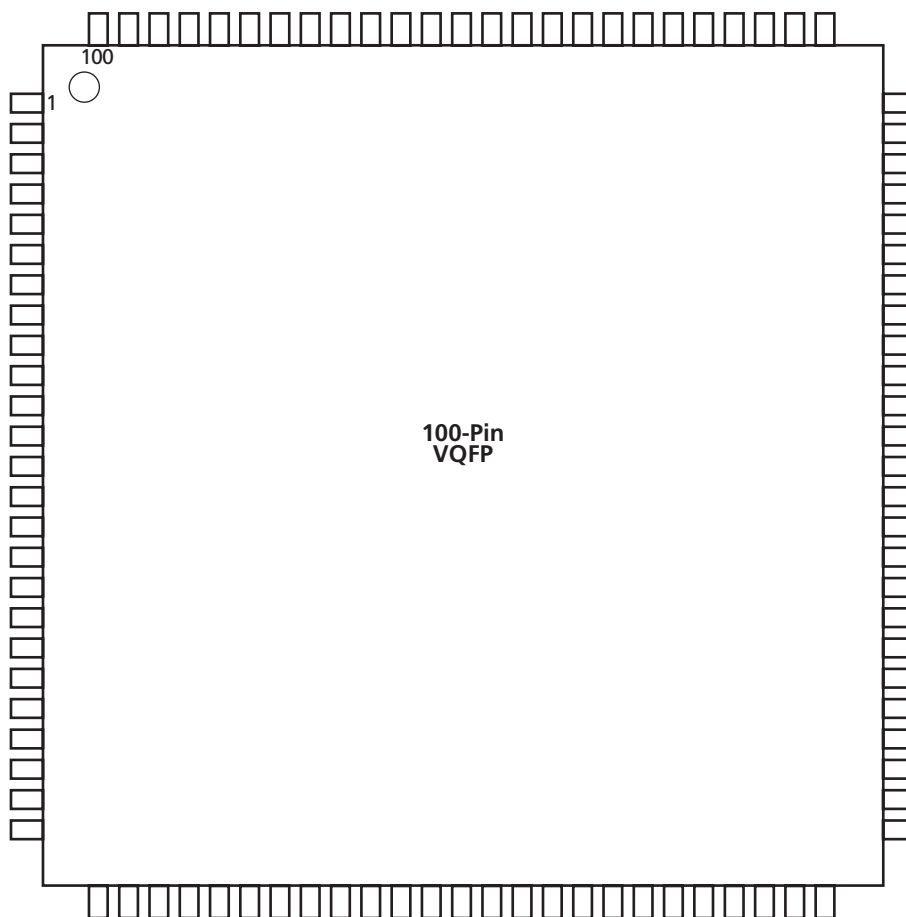
| 132-Pin QFN | |
|-------------|---------------------|
| Pin Number | A3P250 Function |
| A37 | GBB1/IO38RSB0 |
| A38 | GBC0/IO35RSB0 |
| A39 | V _{CC} B0 |
| A40 | IO28RSB0 |
| A41 | IO22RSB0 |
| A42 | IO18RSB0 |
| A43 | IO14RSB0 |
| A44 | IO11RSB0 |
| A45 | IO07RSB0 |
| A46 | V _{CC} |
| A47 | GAC1/IO05RSB0 |
| A48 | GAB0/IO02RSB0 |
| B1 | IO118VDB3 |
| B2 | GAC2/IO116UDB3 |
| B3 | GND |
| B4 | GFC0/IO110NDB3 |
| B5 | V _{COMPLF} |
| B6 | GND |
| B7 | GFB2/IO106PSB3 |
| B8 | IO103PDB3 |
| B9 | GND |
| B10 | GEB0/IO99NDB3 |
| B11 | VMV3 |
| B12 | GEB2/IO96RSB2 |
| B13 | IO92RSB2 |
| B14 | GND |
| B15 | IO89RSB2 |
| B16 | IO86RSB2 |
| B17 | GND |
| B18 | IO78RSB2 |
| B19 | IO72RSB2 |
| B20 | GND |
| B21 | GNDQ |
| B22 | TMS |
| B23 | TDO |
| B24 | GDC0/IO58VDB1 |

| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P250 Function |
| B25 | GND |
| B26 | IO54PDB1 |
| B27 | GCB2/IO52PDB1 |
| B28 | GND |
| B29 | GCB0/IO49NDB1 |
| B30 | GCC1/IO48PDB1 |
| B31 | GND |
| B32 | GBB2/IO42PDB1 |
| B33 | VMV1 |
| B34 | GBA0/IO39RSB0 |
| B35 | GBC1/IO36RSB0 |
| B36 | GND |
| B37 | IO26RSB0 |
| B38 | IO21RSB0 |
| B39 | GND |
| B40 | IO13RSB0 |
| B41 | IO08RSB0 |
| B42 | GND |
| B43 | GAC0/IO04RSB0 |
| B44 | GNDQ |
| C1 | GAA2/IO118UDB3 |
| C2 | IO116VDB3 |
| C3 | V _{CC} |
| C4 | GFB1/IO109PPB3 |
| C5 | GFA0/IO108NPB3 |
| C6 | GFA2/IO107PSB3 |
| C7 | IO105NPB3 |
| C8 | V _{CC} B3 |
| C9 | GEB1/IO99PDB3 |
| C10 | GNDQ |
| C11 | GEA2/IO97RSB2 |
| C12 | IO94RSB2 |
| C13 | V _{CC} B2 |
| C14 | IO88RSB2 |
| C15 | IO84RSB2 |
| C16 | IO80RSB2 |



| 132-Pin QFN | |
|-------------|--------------------|
| Pin Number | A3P250 Function |
| C17 | IO74RSB2 |
| C18 | V _{CC} B2 |
| C19 | TCK |
| C20 | VMV2 |
| C21 | V _{PUMP} |
| C22 | V _{JTAG} |
| C23 | V _{CC} B1 |
| C24 | IO53NSB1 |
| C25 | IO51NPB1 |
| C26 | GCA1/IO50PPB1 |
| C27 | GCC0/IO48NDB1 |
| C28 | V _{CC} B1 |
| C29 | IO42NDB1 |
| C30 | GNDQ |
| C31 | GBA1/IO40RSB0 |
| C32 | GBB0/IO37RSB0 |
| C33 | V _{CC} |
| C34 | IO24RSB0 |
| C35 | IO19RSB0 |
| C36 | IO16RSB0 |
| C37 | IO10RSB0 |
| C38 | V _{CC} B0 |
| C39 | GAB1/IO03RSB0 |
| C40 | VMV0 |
| D1 | GND |
| D2 | GND |
| D3 | GND |
| D4 | GND |

100-Pin VQFP



Note: This is the top view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 100-Pin VQFP | | 100-Pin VQFP | | 100-Pin VQFP | |
|--------------|--------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P030 Function | Pin Number | A3P030 Function | Pin Number | A3P030 Function |
| 1 | GND | 37 | V _{CC} | 73 | IO27RSB0 |
| 2 | IO82RSB1 | 38 | GND | 74 | IO26RSB0 |
| 3 | IO81RSB1 | 39 | V _{CC} B1 | 75 | IO25RSB0 |
| 4 | IO80RSB1 | 40 | IO49RSB1 | 76 | IO24RSB0 |
| 5 | IO79RSB1 | 41 | IO47RSB1 | 77 | IO23RSB0 |
| 6 | IO78RSB1 | 42 | IO46RSB1 | 78 | IO22RSB0 |
| 7 | IO77RSB1 | 43 | IO45RSB1 | 79 | IO21RSB0 |
| 8 | IO76RSB1 | 44 | IO44RSB1 | 80 | IO20RSB0 |
| 9 | GND | 45 | IO43RSB1 | 81 | IO19RSB0 |
| 10 | IO75RSB1 | 46 | IO42RSB1 | 82 | IO18RSB0 |
| 11 | IO74RSB1 | 47 | TCK | 83 | IO17RSB0 |
| 12 | GEC0/IO73RSB1 | 48 | TDI | 84 | IO16RSB0 |
| 13 | GEA0/IO72RSB1 | 49 | TMS | 85 | IO15RSB0 |
| 14 | GEBO/IO71RSB1 | 50 | NC | 86 | IO14RSB0 |
| 15 | IO70RSB1 | 51 | GND | 87 | V _{CC} B0 |
| 16 | IO69RSB1 | 52 | V _{PUMP} | 88 | GND |
| 17 | V _{CC} | 53 | NC | 89 | V _{CC} |
| 18 | V _{CC} B1 | 54 | TDO | 90 | IO12RSB0 |
| 19 | IO68RSB1 | 55 | TRST | 91 | IO10RSB0 |
| 20 | IO67RSB1 | 56 | V _{JTAG} | 92 | IO08RSB0 |
| 21 | IO66RSB1 | 57 | IO41RSB0 | 93 | IO07RSB0 |
| 22 | IO65RSB1 | 58 | IO40RSB0 | 94 | IO06RSB0 |
| 23 | IO64RSB1 | 59 | IO39RSB0 | 95 | IO05RSB0 |
| 24 | IO63RSB1 | 60 | IO38RSB0 | 96 | IO04RSB0 |
| 25 | IO62RSB1 | 61 | IO37RSB0 | 97 | IO03RSB0 |
| 26 | IO61RSB1 | 62 | IO36RSB0 | 98 | IO02RSB0 |
| 27 | IO60RSB1 | 63 | GDB0/IO34RSB0 | 99 | IO01RSB0 |
| 28 | IO59RSB1 | 64 | GDA0/IO33RSB0 | 100 | IO00RSB0 |
| 29 | IO58RSB1 | 65 | GDC0/IO32RSB0 | | |
| 30 | IO57RSB1 | 66 | V _{CC} B0 | | |
| 31 | IO56RSB1 | 67 | GND | | |
| 32 | IO55RSB1 | 68 | V _{CC} | | |
| 33 | IO54RSB1 | 69 | IO31RSB0 | | |
| 34 | IO53RSB1 | 70 | IO30RSB0 | | |
| 35 | IO52RSB1 | 71 | IO29RSB0 | | |
| 36 | IO51RSB1 | 72 | IO28RSB0 | | |

| 100-Pin VQFP | |
|--------------|---------------------|
| Pin Number | A3P060 Function |
| 1 | GND |
| 2 | GAA2/IO51RSB1 |
| 3 | IO52RSB1 |
| 4 | GAB2/IO53RSB1 |
| 5 | IO95RSB1 |
| 6 | GAC2/IO94RSB1 |
| 7 | IO93RSB1 |
| 8 | IO92RSB1 |
| 9 | GND |
| 10 | GFB1/IO87RSB1 |
| 11 | GFB0/IO86RSB1 |
| 12 | V _{COMPLF} |
| 13 | GFA0/IO85RSB1 |
| 14 | V _{CCPLF} |
| 15 | GFA1/IO84RSB1 |
| 16 | GFA2/IO83RSB1 |
| 17 | V _{CC} |
| 18 | V _{CCIB1} |
| 19 | GEC1/IO77RSB1 |
| 20 | GEB1/IO75RSB1 |
| 21 | GEB0/IO74RSB1 |
| 22 | GEA1/IO73RSB1 |
| 23 | GEA0/IO72RSB1 |
| 24 | VMV1 |
| 25 | GNDQ |
| 26 | GEA2/IO71RSB1 |
| 27 | GEB2/IO70RSB1 |
| 28 | GEC2/IO69RSB1 |
| 29 | IO68RSB1 |
| 30 | IO67RSB1 |
| 31 | IO66RSB1 |
| 32 | IO65RSB1 |
| 33 | IO64RSB1 |
| 34 | IO63RSB1 |
| 35 | IO62RSB1 |
| 36 | IO61RSB1 |

| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P060 Function |
| 37 | V _{CC} |
| 38 | GND |
| 39 | V _{CCIB1} |
| 40 | IO60RSB1 |
| 41 | IO59RSB1 |
| 42 | IO58RSB1 |
| 43 | IO57RSB1 |
| 44 | GDC2/IO56RSB1 |
| 45 | GDB2/IO55RSB1 |
| 46 | GDA2/IO54RSB1 |
| 47 | TCK |
| 48 | TDI |
| 49 | TMS |
| 50 | VMV1 |
| 51 | GND |
| 52 | V _{PUMP} |
| 53 | NC |
| 54 | TDO |
| 55 | TRST |
| 56 | V _{JTAG} |
| 57 | GDA1/IO49RSB0 |
| 58 | GDC0/IO46RSB0 |
| 59 | GDC1/IO45RSB0 |
| 60 | GCC2/IO43RSB0 |
| 61 | GCB2/IO42RSB0 |
| 62 | GCA0/IO40RSB0 |
| 63 | GCA1/IO39RSB0 |
| 64 | GCC0/IO36RSB0 |
| 65 | GCC1/IO35RSB0 |
| 66 | V _{CCIB0} |
| 67 | GND |
| 68 | V _{CC} |
| 69 | IO31RSB0 |
| 70 | GBC2/IO29RSB0 |
| 71 | GBB2/IO27RSB0 |
| 72 | IO26RSB0 |

| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P060 Function |
| 73 | GBA2/IO25RSB0 |
| 74 | VMV0 |
| 75 | GNDQ |
| 76 | GBA1/IO24RSB0 |
| 77 | GBA0/IO23RSB0 |
| 78 | GBB1/IO22RSB0 |
| 79 | GBB0/IO21RSB0 |
| 80 | GBC1/IO20RSB0 |
| 81 | GBC0/IO19RSB0 |
| 82 | IO18RSB0 |
| 83 | IO17RSB0 |
| 84 | IO15RSB0 |
| 85 | IO13RSB0 |
| 86 | IO11RSB0 |
| 87 | V _{CCIB0} |
| 88 | GND |
| 89 | V _{CC} |
| 90 | IO10RSB0 |
| 91 | IO09RSB0 |
| 92 | IO08RSB0 |
| 93 | GAC1/IO07RSB0 |
| 94 | GAC0/IO06RSB0 |
| 95 | GAB1/IO05RSB0 |
| 96 | GAB0/IO04RSB0 |
| 97 | GAA1/IO03RSB0 |
| 98 | GAA0/IO02RSB0 |
| 99 | IO01RSB0 |
| 100 | IO00RSB0 |

| 100-Pin VQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 1 | GND |
| 2 | GAA2/IO67RSB1 |
| 3 | IO68RSB1 |
| 4 | GAB2/IO69RSB1 |
| 5 | IO132RSB1 |
| 6 | GAC2/IO131RSB1 |
| 7 | IO130RSB1 |
| 8 | IO129RSB1 |
| 9 | GND |
| 10 | GFB1/IO124RSB1 |
| 11 | GFB0/IO123RSB1 |
| 12 | V _{COMPLF} |
| 13 | GFA0/IO122RSB1 |
| 14 | V _{CCPLF} |
| 15 | GFA1/IO121RSB1 |
| 16 | GFA2/IO120RSB1 |
| 17 | V _{CC} |
| 18 | V _{CC1B1} |
| 19 | GEC0/IO111RSB1 |
| 20 | GEB1/IO110RSB1 |
| 21 | GEB0/IO109RSB1 |
| 22 | GEA1/IO108RSB1 |
| 23 | GEA0/IO107RSB1 |
| 24 | VMV1 |
| 25 | GNDQ |
| 26 | GEA2/IO106RSB1 |
| 27 | GEB2/IO105RSB1 |
| 28 | GEC2/IO104RSB1 |
| 29 | IO102RSB1 |
| 30 | IO100RSB1 |
| 31 | IO99RSB1 |
| 32 | IO97RSB1 |
| 33 | IO96RSB1 |
| 34 | IO95RSB1 |
| 35 | IO94RSB1 |
| 36 | IO93RSB1 |

| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P125 Function |
| 37 | V _{CC} |
| 38 | GND |
| 39 | V _{CC1B1} |
| 40 | IO87RSB1 |
| 41 | IO84RSB1 |
| 42 | IO81RSB1 |
| 43 | IO75RSB1 |
| 44 | GDC2/IO72RSB1 |
| 45 | GDB2/IO71RSB1 |
| 46 | GDA2/IO70RSB1 |
| 47 | TCK |
| 48 | TDI |
| 49 | TMS |
| 50 | VMV1 |
| 51 | GND |
| 52 | V _{PUMP} |
| 53 | NC |
| 54 | TDO |
| 55 | TRST |
| 56 | V _{JTAG} |
| 57 | GDA1/IO65RSB0 |
| 58 | GDC0/IO62RSB0 |
| 59 | GDC1/IO61RSB0 |
| 60 | GCC2/IO59RSB0 |
| 61 | GCB2/IO58RSB0 |
| 62 | GCA0/IO56RSB0 |
| 63 | GCA1/IO55RSB0 |
| 64 | GCC0/IO52RSB0 |
| 65 | GCC1/IO51RSB0 |
| 66 | V _{CC1B0} |
| 67 | GND |
| 68 | V _{CC} |
| 69 | IO47RSB0 |
| 70 | GBC2/IO45RSB0 |
| 71 | GBB2/IO43RSB0 |
| 72 | IO42RSB0 |

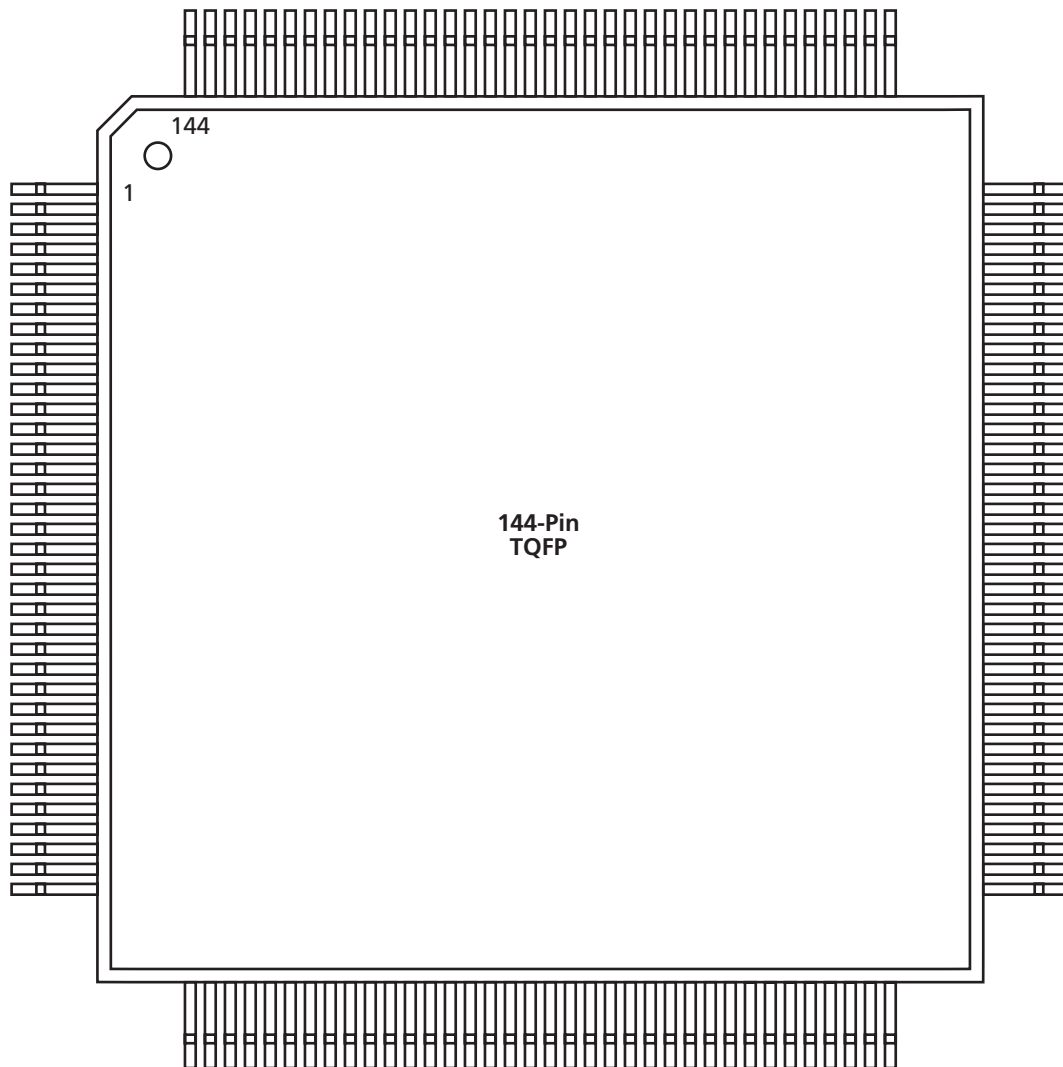
| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P125 Function |
| 73 | GBA2/IO41RSB0 |
| 74 | VMV0 |
| 75 | GNDQ |
| 76 | GBA1/IO40RSB0 |
| 77 | GBA0/IO39RSB0 |
| 78 | GGB1/IO38RSB0 |
| 79 | GGB0/IO37RSB0 |
| 80 | GBC1/IO36RSB0 |
| 81 | GBC0/IO35RSB0 |
| 82 | IO32RSB0 |
| 83 | IO28RSB0 |
| 84 | IO25RSB0 |
| 85 | IO22RSB0 |
| 86 | IO19RSB0 |
| 87 | V _{CC1B0} |
| 88 | GND |
| 89 | V _{CC} |
| 90 | IO15RSB0 |
| 91 | IO13RSB0 |
| 92 | IO11RSB0 |
| 93 | IO09RSB0 |
| 94 | IO07RSB0 |
| 95 | GAC1/IO05RSB0 |
| 96 | GAC0/IO04RSB0 |
| 97 | GAB1/IO03RSB0 |
| 98 | GAB0/IO02RSB0 |
| 99 | GAA1/IO01RSB0 |
| 100 | GAA0/IO00RSB0 |

| 100-Pin VQFP | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| 1 | GND |
| 2 | GAA2/IO118UDB3 |
| 3 | IO118VDB3 |
| 4 | GAB2/IO117UDB3 |
| 5 | IO117VDB3 |
| 6 | GAC2/IO116UDB3 |
| 7 | IO116VDB3 |
| 8 | IO112PSB3 |
| 9 | GND |
| 10 | GFB1/IO109PDB3 |
| 11 | GFB0/IO109NDB3 |
| 12 | V _{COMPLF} |
| 13 | GFA0/IO108NPB3 |
| 14 | V _{CCPLF} |
| 15 | GFA1/IO108PPB3 |
| 16 | GFA2/IO107PSB3 |
| 17 | V _{CC} |
| 18 | V _{CCIB3} |
| 19 | GFC2/IO105PSB3 |
| 20 | GEC1/IO100PDB3 |
| 21 | GEC0/IO100NDB3 |
| 22 | GEA1/IO98PDB3 |
| 23 | GEA0/IO98NDB3 |
| 24 | VMV3 |
| 25 | GNDQ |
| 26 | GEA2/IO97RSB2 |
| 27 | GEB2/IO96RSB2 |
| 28 | GEC2/IO95RSB2 |
| 29 | IO93RSB2 |
| 30 | IO92RSB2 |
| 31 | IO91RSB2 |
| 32 | IO90RSB2 |
| 33 | IO88RSB2 |
| 34 | IO86RSB2 |
| 35 | IO85RSB2 |
| 36 | IO84RSB2 |

| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P250 Function |
| 37 | V _{CC} |
| 38 | GND |
| 39 | V _{CCIB2} |
| 40 | IO77RSB2 |
| 41 | IO74RSB2 |
| 42 | IO71RSB2 |
| 43 | GDC2/IO63RSB2 |
| 44 | GDB2/IO62RSB2 |
| 45 | GDA2/IO61RSB2 |
| 46 | GNDQ |
| 47 | TCK |
| 48 | TDI |
| 49 | TMS |
| 50 | VMV2 |
| 51 | GND |
| 52 | V _{PUMP} |
| 53 | NC |
| 54 | TDO |
| 55 | TRST |
| 56 | V _{JTAG} |
| 57 | GDA1/IO60USB1 |
| 58 | GDC0/IO58VDB1 |
| 59 | GDC1/IO58UDB1 |
| 60 | IO52NDB1 |
| 61 | GCB2/IO52PDB1 |
| 62 | GCA1/IO50PDB1 |
| 63 | GCA0/IO50NDB1 |
| 64 | GCC0/IO48NDB1 |
| 65 | GCC1/IO48PDB1 |
| 66 | V _{CCIB1} |
| 67 | GND |
| 68 | V _{CC} |
| 69 | IO43NDB1 |
| 70 | GBC2/IO43PDB1 |
| 71 | GBB2/IO42PSB1 |
| 72 | IO41NDB1 |

| 100-Pin VQFP | |
|--------------|--------------------|
| Pin Number | A3P250 Function |
| 73 | GBA2/IO41PDB1 |
| 74 | VMV1 |
| 75 | GNDQ |
| 76 | GBA1/IO40RSB0 |
| 77 | GBA0/IO39RSB0 |
| 78 | GBB1/IO38RSB0 |
| 79 | GBB0/IO37RSB0 |
| 80 | GBC1/IO36RSB0 |
| 81 | GBC0/IO35RSB0 |
| 82 | IO29RSB0 |
| 83 | IO27RSB0 |
| 84 | IO25RSB0 |
| 85 | IO23RSB0 |
| 86 | IO21RSB0 |
| 87 | V _{CCIB0} |
| 88 | GND |
| 89 | V _{CC} |
| 90 | IO15RSB0 |
| 91 | IO13RSB0 |
| 92 | IO11RSB0 |
| 93 | GAC1/IO05RSB0 |
| 94 | GAC0/IO04RSB0 |
| 95 | GAB1/IO03RSB0 |
| 96 | GAB0/IO02RSB0 |
| 97 | GAA1/IO01RSB0 |
| 98 | GAA0/IO00RSB0 |
| 99 | GNDQ |
| 100 | VMV0 |

144-Pin TQFP



Note: This is the top view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P060 Function |
| 1 | GAA2/IO51RSB1 |
| 2 | IO52RSB1 |
| 3 | GAB2/IO53RSB1 |
| 4 | IO95RSB1 |
| 5 | GAC2/IO94RSB1 |
| 6 | IO93RSB1 |
| 7 | IO92RSB1 |
| 8 | IO91RSB1 |
| 9 | V _{CC} |
| 10 | GND |
| 11 | V _{CC} B1 |
| 12 | IO90RSB1 |
| 13 | GFC1/IO89RSB1 |
| 14 | GFC0/IO88RSB1 |
| 15 | GFB1/IO87RSB1 |
| 16 | GFB0/IO86RSB1 |
| 17 | V _{COMPLF} |
| 18 | GFA0/IO85RSB1 |
| 19 | V _{CC} PLF |
| 20 | GFA1/IO84RSB1 |
| 21 | GFA2/IO83RSB1 |
| 22 | GFB2/IO82RSB1 |
| 23 | GFC2/IO81RSB1 |
| 24 | IO80RSB1 |
| 25 | IO79RSB1 |
| 26 | IO78RSB1 |
| 27 | GND |
| 28 | V _{CC} B1 |
| 29 | GEC1/IO77RSB1 |
| 30 | GEC0/IO76RSB1 |
| 31 | GEB1/IO75RSB1 |
| 32 | GEB0/IO74RSB1 |
| 33 | GEA1/IO73RSB1 |
| 34 | GEA0/IO72RSB1 |
| 35 | VMV1 |
| 36 | GNDQ |

| 144-Pin TQFP | |
|--------------|--------------------|
| Pin Number | A3P060 Function |
| 37 | NC |
| 38 | GEA2/IO71RSB1 |
| 39 | GEB2/IO70RSB1 |
| 40 | GEC2/IO69RSB1 |
| 41 | IO68RSB1 |
| 42 | IO67RSB1 |
| 43 | IO66RSB1 |
| 44 | IO65RSB1 |
| 45 | V _{CC} |
| 46 | GND |
| 47 | V _{CC} B1 |
| 48 | NC |
| 49 | IO64RSB1 |
| 50 | NC |
| 51 | IO63RSB1 |
| 52 | NC |
| 53 | IO62RSB1 |
| 54 | NC |
| 55 | IO61RSB1 |
| 56 | NC |
| 57 | NC |
| 58 | IO60RSB1 |
| 59 | IO59RSB1 |
| 60 | IO58RSB1 |
| 61 | IO57RSB1 |
| 62 | NC |
| 63 | GND |
| 64 | NC |
| 65 | GDC2/IO56RSB1 |
| 66 | GDB2/IO55RSB1 |
| 67 | GDA2/IO54RSB1 |
| 68 | GNDQ |
| 69 | TCK |
| 70 | TDI |
| 71 | TMS |
| 72 | VMV1 |

| 144-Pin TQFP | |
|--------------|--------------------|
| Pin Number | A3P060 Function |
| 73 | V _{PUMP} |
| 74 | NC |
| 75 | TDO |
| 76 | TRST |
| 77 | V _{JTAG} |
| 78 | GDA0/IO50RSB0 |
| 79 | GDB0/IO48RSB0 |
| 80 | GDB1/IO47RSB0 |
| 81 | V _{CC} B0 |
| 82 | GND |
| 83 | IO44RSB0 |
| 84 | GCC2/IO43RSB0 |
| 85 | GCB2/IO42RSB0 |
| 86 | GCA2/IO41RSB0 |
| 87 | GCA0/IO40RSB0 |
| 88 | GCA1/IO39RSB0 |
| 89 | GCB0/IO38RSB0 |
| 90 | GCB1/IO37RSB0 |
| 91 | GCC0/IO36RSB0 |
| 92 | GCC1/IO35RSB0 |
| 93 | IO34RSB0 |
| 94 | IO33RSB0 |
| 95 | NC |
| 96 | NC |
| 97 | NC |
| 98 | V _{CC} B0 |
| 99 | GND |
| 100 | V _{CC} |
| 101 | IO30RSB0 |
| 102 | GBC2/IO29RSB0 |
| 103 | IO28RSB0 |
| 104 | GBB2/IO27RSB0 |
| 105 | IO26RSB0 |
| 106 | GBA2/IO25RSB0 |
| 107 | VMV0 |
| 108 | GNDQ |

| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P060 Function |
| 109 | NC |
| 110 | NC |
| 111 | GBA1/IO24RSB0 |
| 112 | GBA0/IO23RSB0 |
| 113 | GBB1/IO22RSB0 |
| 114 | GBB0/IO21RSB0 |
| 115 | GBC1/IO20RSB0 |
| 116 | GBC0/IO19RSB0 |
| 117 | V _{CCI} B0 |
| 118 | GND |
| 119 | V _{CC} |
| 120 | IO18RSB0 |
| 121 | IO17RSB0 |
| 122 | IO16RSB0 |
| 123 | IO15RSB0 |
| 124 | IO14RSB0 |
| 125 | IO13RSB0 |
| 126 | IO12RSB0 |
| 127 | IO11RSB0 |
| 128 | NC |
| 129 | IO10RSB0 |
| 130 | IO09RSB0 |
| 131 | IO08RSB0 |
| 132 | GAC1/IO07RSB0 |
| 133 | GAC0/IO06RSB0 |
| 134 | NC |
| 135 | GND |
| 136 | NC |
| 137 | GAB1/IO05RSB0 |
| 138 | GAB0/IO04RSB0 |
| 139 | GAA1/IO03RSB0 |
| 140 | GAA0/IO02RSB0 |
| 141 | IO01RSB0 |
| 142 | IO00RSB0 |
| 143 | GNDQ |
| 144 | VMV0 |

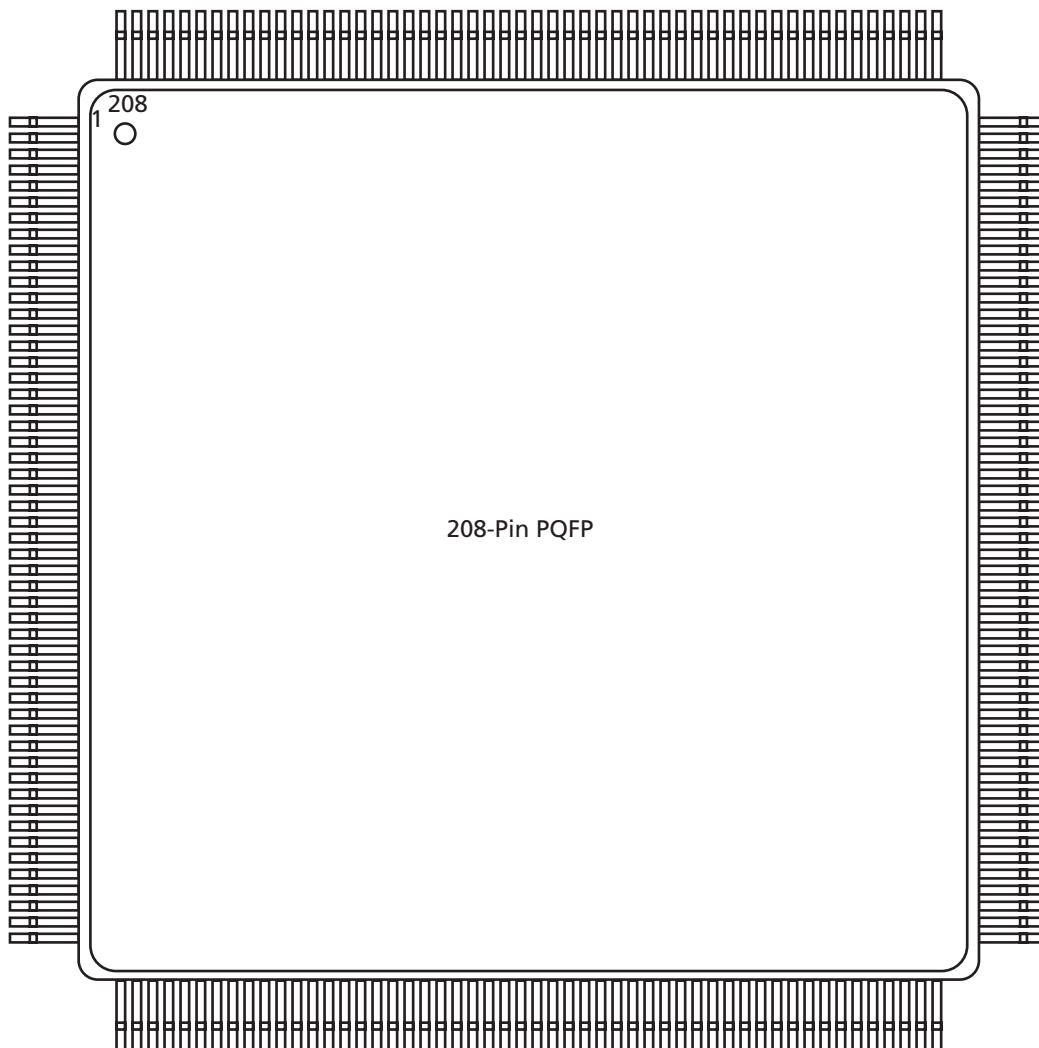
| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 1 | GAA2/IO67RSB1 |
| 2 | IO68RSB1 |
| 3 | GAB2/IO69RSB1 |
| 4 | IO132RSB1 |
| 5 | GAC2/IO131RSB1 |
| 6 | IO130RSB1 |
| 7 | IO129RSB1 |
| 8 | IO128RSB1 |
| 9 | V _{CC} |
| 10 | GND |
| 11 | V _{CC1} B1 |
| 12 | IO127RSB1 |
| 13 | GFC1/IO126RSB1 |
| 14 | GFC0/IO125RSB1 |
| 15 | GFB1/IO124RSB1 |
| 16 | GFB0/IO123RSB1 |
| 17 | V _{COMPLF} |
| 18 | GFA0/IO122RSB1 |
| 19 | V _{CCPLF} |
| 20 | GFA1/IO121RSB1 |
| 21 | GFA2/IO120RSB1 |
| 22 | GFB2/IO119RSB1 |
| 23 | GFC2/IO118RSB1 |
| 24 | IO117RSB1 |
| 25 | IO116RSB1 |
| 26 | IO115RSB1 |
| 27 | GND |
| 28 | V _{CC1} B1 |
| 29 | GEC1/IO112RSB1 |
| 30 | GEC0/IO111RSB1 |
| 31 | GEB1/IO110RSB1 |
| 32 | GEB0/IO109RSB1 |
| 33 | GEA1/IO108RSB1 |
| 34 | GEA0/IO107RSB1 |
| 35 | VMV1 |
| 36 | GNDQ |

| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 37 | NC |
| 38 | GEA2/IO106RSB1 |
| 39 | GEB2/IO105RSB1 |
| 40 | GEC2/IO104RSB1 |
| 41 | IO103RSB1 |
| 42 | IO102RSB1 |
| 43 | IO101RSB1 |
| 44 | IO100RSB1 |
| 45 | V _{CC} |
| 46 | GND |
| 47 | V _{CC1} B1 |
| 48 | IO99RSB1 |
| 49 | IO97RSB1 |
| 50 | IO95RSB1 |
| 51 | IO93RSB1 |
| 52 | IO92RSB1 |
| 53 | IO90RSB1 |
| 54 | IO88RSB1 |
| 55 | IO86RSB1 |
| 56 | IO84RSB1 |
| 57 | IO83RSB1 |
| 58 | IO82RSB1 |
| 59 | IO81RSB1 |
| 60 | IO80RSB1 |
| 61 | IO79RSB1 |
| 62 | V _{CC} |
| 63 | GND |
| 64 | V _{CC1} B1 |
| 65 | GDC2/IO72RSB1 |
| 66 | GDB2/IO71RSB1 |
| 67 | GDA2/IO70RSB1 |
| 68 | GNDQ |
| 69 | TCK |
| 70 | TDI |
| 71 | TMS |
| 72 | VMV1 |

| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 73 | V _{PUMP} |
| 74 | NC |
| 75 | TDO |
| 76 | TRST |
| 77 | V _{JTAG} |
| 78 | GDA0/IO66RSB0 |
| 79 | GDB0/IO64RSB0 |
| 80 | GDB1/IO63RSB0 |
| 81 | V _{CC1} B0 |
| 82 | GND |
| 83 | IO60RSB0 |
| 84 | GCC2/IO59RSB0 |
| 85 | GCB2/IO58RSB0 |
| 86 | GCA2/IO57RSB0 |
| 87 | GCA0/IO56RSB0 |
| 88 | GCA1/IO55RSB0 |
| 89 | GCB0/IO54RSB0 |
| 90 | GCB1/IO53RSB0 |
| 91 | GCC0/IO52RSB0 |
| 92 | GCC1/IO51RSB0 |
| 93 | IO50RSB0 |
| 94 | IO49RSB0 |
| 95 | NC |
| 96 | NC |
| 97 | NC |
| 98 | V _{CC1} B0 |
| 99 | GND |
| 100 | V _{CC} |
| 101 | IO47RSB0 |
| 102 | GBC2/IO45RSB0 |
| 103 | IO44RSB0 |
| 104 | GBB2/IO43RSB0 |
| 105 | IO42RSB0 |
| 106 | GBA2/IO41RSB0 |
| 107 | VMV0 |
| 108 | GNDQ |

| 144-Pin TQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 109 | GBA1/IO40RSB0 |
| 110 | GBA0/IO39RSB0 |
| 111 | GBB1/IO38RSB0 |
| 112 | GBB0/IO37RSB0 |
| 113 | GBC1/IO36RSB0 |
| 114 | GBC0/IO35RSB0 |
| 115 | IO34RSB0 |
| 116 | IO33RSB0 |
| 117 | V _{CCI} B0 |
| 118 | GND |
| 119 | V _{CC} |
| 120 | IO29RSB0 |
| 121 | IO28RSB0 |
| 122 | IO27RSB0 |
| 123 | IO25RSB0 |
| 124 | IO23RSB0 |
| 125 | IO21RSB0 |
| 126 | IO19RSB0 |
| 127 | IO17RSB0 |
| 128 | IO16RSB0 |
| 129 | IO14RSB0 |
| 130 | IO12RSB0 |
| 131 | IO10RSB0 |
| 132 | IO08RSB0 |
| 133 | IO06RSB0 |
| 134 | V _{CCI} B0 |
| 135 | GND |
| 136 | V _{CC} |
| 137 | GAC1/IO05RSB0 |
| 138 | GAC0/IO04RSB0 |
| 139 | GAB1/IO03RSB0 |
| 140 | GAB0/IO02RSB0 |
| 141 | GAA1/IO01RSB0 |
| 142 | GAA0/IO00RSB0 |
| 143 | GNDQ |
| 144 | VMV0 |

208-Pin PQFP



Note: This is the top view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|----------------------|--------------|---------------------|--------------|---------------------|
| Pin Number | A3P125 Function | Pin Number | A3P125 Function | Pin Number | A3P125 Function |
| 1 | GND | 37 | IO116RSB1 | 73 | IO92RSB1 |
| 2 | GAA2/IO67RSB1 | 38 | IO115RSB1 | 74 | IO91RSB1 |
| 3 | IO68RSB1 | 39 | NC | 75 | IO90RSB1 |
| 4 | GAB2/IO69RSB1 | 40 | V _{CC1} B1 | 76 | IO89RSB1 |
| 5 | IO132RSB1 | 41 | GND | 77 | IO88RSB1 |
| 6 | GAC2/IO131RSB1 | 42 | IO114RSB1 | 78 | IO87RSB1 |
| 7 | NC | 43 | IO113RSB1 | 79 | IO86RSB1 |
| 8 | NC | 44 | GEC1/IO112RSB1 | 80 | IO85RSB1 |
| 9 | IO130RSB1 | 45 | GEC0/IO111RSB1 | 81 | GND |
| 10 | IO129RSB1 | 46 | GEB1/IO110RSB1 | 82 | IO84RSB1 |
| 11 | NC | 47 | GEB0/IO109RSB1 | 83 | IO83RSB1 |
| 12 | IO128RSB1 | 48 | GEA1/IO108RSB1 | 84 | IO82RSB1 |
| 13 | NC | 49 | GEA0/IO107RSB1 | 85 | IO81RSB1 |
| 14 | NC | 50 | VMV1 | 86 | IO80RSB1 |
| 15 | NC | 51 | GNDQ | 87 | IO79RSB1 |
| 16 | V _{CC} | 52 | GND | 88 | V _{CC} |
| 17 | GND | 53 | NC | 89 | V _{CC1} B1 |
| 18 | V _{CC1} B1 | 54 | NC | 90 | IO78RSB1 |
| 19 | IO127RSB1 | 55 | GEA2/IO106RSB1 | 91 | IO77RSB1 |
| 20 | NC | 56 | GEB2/IO105RSB1 | 92 | IO76RSB1 |
| 21 | GFC1/IO126RSB1 | 57 | GEC2/IO104RSB1 | 93 | IO75RSB1 |
| 22 | GFC0/IO125RSB1 | 58 | IO103RSB1 | 94 | IO74RSB1 |
| 23 | GFB1/IO124RSB1 | 59 | IO102RSB1 | 95 | IO73RSB1 |
| 24 | GFB0/IO123RSB1 | 60 | IO101RSB1 | 96 | GDC2/IO72RSB1 |
| 25 | V _{CCOMPLF} | 61 | IO100RSB1 | 97 | GND |
| 26 | GFA0/IO122RSB1 | 62 | V _{CC1} B1 | 98 | GDB2/IO71RSB1 |
| 27 | V _{CCPLF} | 63 | IO99RSB1 | 99 | GDA2/IO70RSB1 |
| 28 | GFA1/IO121RSB1 | 64 | IO98RSB1 | 100 | GNDQ |
| 29 | GND | 65 | GND | 101 | TCK |
| 30 | GFA2/IO120RSB1 | 66 | IO97RSB1 | 102 | TDI |
| 31 | NC | 67 | IO96RSB1 | 103 | TMS |
| 32 | GFB2/IO119RSB1 | 68 | IO95RSB1 | 104 | VMV1 |
| 33 | NC | 69 | IO94RSB1 | 105 | GND |
| 34 | GFC2/IO118RSB1 | 70 | IO93RSB1 | 106 | V _{PUMP} |
| 35 | IO117RSB1 | 71 | V _{CC} | 107 | NC |
| 36 | NC | 72 | V _{CC1} B1 | 108 | TDO |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 109 | TRST |
| 110 | V _{JTAG} |
| 111 | GDA0/IO66RSB0 |
| 112 | GDA1/IO65RSB0 |
| 113 | GDB0/IO64RSB0 |
| 114 | GDB1/IO63RSB0 |
| 115 | GDC0/IO62RSB0 |
| 116 | GDC1/IO61RSB0 |
| 117 | NC |
| 118 | NC |
| 119 | NC |
| 120 | NC |
| 121 | NC |
| 122 | GND |
| 123 | V _{CC1} B0 |
| 124 | NC |
| 125 | NC |
| 126 | V _{CC} |
| 127 | IO60RSB0 |
| 128 | GCC2/IO59RSB0 |
| 129 | GCB2/IO58RSB0 |
| 130 | GND |
| 131 | GCA2/IO57RSB0 |
| 132 | GCA0/IO56RSB0 |
| 133 | GCA1/IO55RSB0 |
| 134 | GCB0/IO54RSB0 |
| 135 | GCB1/IO53RSB0 |
| 136 | GCC0/IO52RSB0 |
| 137 | GCC1/IO51RSB0 |
| 138 | IO50RSB0 |
| 139 | IO49RSB0 |
| 140 | V _{CC1} B0 |
| 141 | GND |
| 142 | V _{CC} |
| 143 | IO48RSB0 |
| 144 | IO47RSB0 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 145 | IO46RSB0 |
| 146 | NC |
| 147 | NC |
| 148 | NC |
| 149 | GBC2/IO45RSB0 |
| 150 | IO44RSB0 |
| 151 | GBB2/IO43RSB0 |
| 152 | IO42RSB0 |
| 153 | GBA2/IO41RSB0 |
| 154 | VMV0 |
| 155 | GNDQ |
| 156 | GND |
| 157 | NC |
| 158 | GBA1/IO40RSB0 |
| 159 | GBA0/IO39RSB0 |
| 160 | GBB1/IO38RSB0 |
| 161 | GBB0/IO37RSB0 |
| 162 | GND |
| 163 | GBC1/IO36RSB0 |
| 164 | GBC0/IO35RSB0 |
| 165 | IO34RSB0 |
| 166 | IO33RSB0 |
| 167 | IO32RSB0 |
| 168 | IO31RSB0 |
| 169 | IO30RSB0 |
| 170 | V _{CC1} B0 |
| 171 | V _{CC} |
| 172 | IO29RSB0 |
| 173 | IO28RSB0 |
| 174 | IO27RSB0 |
| 175 | IO26RSB0 |
| 176 | IO25RSB0 |
| 177 | IO24RSB0 |
| 178 | GND |
| 179 | IO23RSB0 |
| 180 | IO22RSB0 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| 181 | IO21RSB0 |
| 182 | IO20RSB0 |
| 183 | IO19RSB0 |
| 184 | IO18RSB0 |
| 185 | IO17RSB0 |
| 186 | V _{CC1} B0 |
| 187 | V _{CC} |
| 188 | IO16RSB0 |
| 189 | IO15RSB0 |
| 190 | IO14RSB0 |
| 191 | IO13RSB0 |
| 192 | IO12RSB0 |
| 193 | IO11RSB0 |
| 194 | IO10RSB0 |
| 195 | GND |
| 196 | IO09RSB0 |
| 197 | IO08RSB0 |
| 198 | IO07RSB0 |
| 199 | IO06RSB0 |
| 200 | V _{CC1} B0 |
| 201 | GAC1/IO05RSB0 |
| 202 | GAC0/IO04RSB0 |
| 203 | GAB1/IO03RSB0 |
| 204 | GAB0/IO02RSB0 |
| 205 | GAA1/IO01RSB0 |
| 206 | GAA0/IO00RSB0 |
| 207 | GNDQ |
| 208 | VMV0 |

| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|---------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P250 Function | Pin Number | A3P250 Function | Pin Number | A3P250 Function |
| 1 | GND | 37 | IO104PDB3 | 73 | IO83RSB2 |
| 2 | GAA2/IO118UDB3 | 38 | IO104NDB3 | 74 | IO82RSB2 |
| 3 | IO118VDB3 | 39 | IO103PSB3 | 75 | IO81RSB2 |
| 4 | GAB2/IO117UDB3 | 40 | V _{CC} B3 | 76 | IO80RSB2 |
| 5 | IO117VDB3 | 41 | GND | 77 | IO79RSB2 |
| 6 | GAC2/IO116UDB3 | 42 | IO101PDB3 | 78 | IO78RSB2 |
| 7 | IO116VDB3 | 43 | IO101NDB3 | 79 | IO77RSB2 |
| 8 | IO115UDB3 | 44 | GEC1/IO100PDB3 | 80 | IO76RSB2 |
| 9 | IO115VDB3 | 45 | GEC0/IO100NDB3 | 81 | GND |
| 10 | IO114UDB3 | 46 | GEB1/IO99PDB3 | 82 | IO75RSB2 |
| 11 | IO114VDB3 | 47 | GEB0/IO99NDB3 | 83 | IO74RSB2 |
| 12 | IO113PDB3 | 48 | GEA1/IO98PDB3 | 84 | IO73RSB2 |
| 13 | IO113NDB3 | 49 | GEA0/IO98NDB3 | 85 | IO72RSB2 |
| 14 | IO112PDB3 | 50 | VMV3 | 86 | IO71RSB2 |
| 15 | IO112NDB3 | 51 | GNDQ | 87 | IO70RSB2 |
| 16 | V _{CC} | 52 | GND | 88 | V _{CC} |
| 17 | GND | 53 | NC | 89 | V _{CC} B2 |
| 18 | V _{CC} B3 | 54 | NC | 90 | IO69RSB2 |
| 19 | IO111PDB3 | 55 | GEA2/IO97RSB2 | 91 | IO68RSB2 |
| 20 | IO111NDB3 | 56 | GEB2/IO96RSB2 | 92 | IO67RSB2 |
| 21 | GFC1/IO110PDB3 | 57 | GEC2/IO95RSB2 | 93 | IO66RSB2 |
| 22 | GFC0/IO110NDB3 | 58 | IO94RSB2 | 94 | IO65RSB2 |
| 23 | GFB1/IO109PDB3 | 59 | IO93RSB2 | 95 | IO64RSB2 |
| 24 | GFB0/IO109NDB3 | 60 | IO92RSB2 | 96 | GDC2/IO63RSB2 |
| 25 | V _{CC} PLF | 61 | IO91RSB2 | 97 | GND |
| 26 | GFA0/IO108NPB3 | 62 | V _{CC} B2 | 98 | GDB2/IO62RSB2 |
| 27 | V _{CC} PLF | 63 | IO90RSB2 | 99 | GDA2/IO61RSB2 |
| 28 | GFA1/IO108PPB3 | 64 | IO89RSB2 | 100 | GNDQ |
| 29 | GND | 65 | GND | 101 | TCK |
| 30 | GFA2/IO107PDB3 | 66 | IO88RSB2 | 102 | TDI |
| 31 | IO107NDB3 | 67 | IO87RSB2 | 103 | TMS |
| 32 | GFB2/IO106PDB3 | 68 | IO86RSB2 | 104 | VMV2 |
| 33 | IO106NDB3 | 69 | IO85RSB2 | 105 | GND |
| 34 | GFC2/IO105PDB3 | 70 | IO84RSB2 | 106 | V _{PUMP} |
| 35 | IO105NDB3 | 71 | V _{CC} | 107 | NC |
| 36 | NC | 72 | V _{CC} B2 | 108 | TDO |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| 109 | TRST |
| 110 | V _{JTAG} |
| 111 | GDA0/IO60VDB1 |
| 112 | GDA1/IO60UDB1 |
| 113 | GDB0/IO59VDB1 |
| 114 | GDB1/IO59UDB1 |
| 115 | GDC0/IO58VDB1 |
| 116 | GDC1/IO58UDB1 |
| 117 | IO57VDB1 |
| 118 | IO57UDB1 |
| 119 | IO56NDB1 |
| 120 | IO56PDB1 |
| 121 | IO55RSB1 |
| 122 | GND |
| 123 | V _{CC1} B1 |
| 124 | NC |
| 125 | NC |
| 126 | V _{CC} |
| 127 | IO53NDB1 |
| 128 | GCC2/IO53PDB1 |
| 129 | GCB2/IO52PSB1 |
| 130 | GND |
| 131 | GCA2/IO51PSB1 |
| 132 | GCA1/IO50PDB1 |
| 133 | GCA0/IO50NDB1 |
| 134 | GCB0/IO49NDB1 |
| 135 | GCB1/IO49PDB1 |
| 136 | GCC0/IO48NDB1 |
| 137 | GCC1/IO48PDB1 |
| 138 | IO47NDB1 |
| 139 | IO47PDB1 |
| 140 | V _{CC1} B1 |
| 141 | GND |
| 142 | V _{CC} |
| 143 | IO46RSB1 |
| 144 | IO45NDB1 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| 145 | IO45PDB1 |
| 146 | IO44NDB1 |
| 147 | IO44PDB1 |
| 148 | IO43NDB1 |
| 149 | GBC2/IO43PDB1 |
| 150 | IO42NDB1 |
| 151 | GBB2/IO42PDB1 |
| 152 | IO41NDB1 |
| 153 | GBA2/IO41PDB1 |
| 154 | VMV1 |
| 155 | GNDQ |
| 156 | GND |
| 157 | NC |
| 158 | GBA1/IO40RSB0 |
| 159 | GBA0/IO39RSB0 |
| 160 | GBB1/IO38RSB0 |
| 161 | GBB0/IO37RSB0 |
| 162 | GND |
| 163 | GBC1/IO36RSB0 |
| 164 | GBC0/IO35RSB0 |
| 165 | IO34RSB0 |
| 166 | IO33RSB0 |
| 167 | IO32RSB0 |
| 168 | IO31RSB0 |
| 169 | IO30RSB0 |
| 170 | V _{CC1} B0 |
| 171 | V _{CC} |
| 172 | IO29RSB0 |
| 173 | IO28RSB0 |
| 174 | IO27RSB0 |
| 175 | IO26RSB0 |
| 176 | IO25RSB0 |
| 177 | IO24RSB0 |
| 178 | GND |
| 179 | IO23RSB0 |
| 180 | IO22RSB0 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| 181 | IO21RSB0 |
| 182 | IO20RSB0 |
| 183 | IO19RSB0 |
| 184 | IO18RSB0 |
| 185 | IO17RSB0 |
| 186 | V _{CC1} B0 |
| 187 | V _{CC} |
| 188 | IO16RSB0 |
| 189 | IO15RSB0 |
| 190 | IO14RSB0 |
| 191 | IO13RSB0 |
| 192 | IO12RSB0 |
| 193 | IO11RSB0 |
| 194 | IO10RSB0 |
| 195 | GND |
| 196 | IO09RSB0 |
| 197 | IO08RSB0 |
| 198 | IO07RSB0 |
| 199 | IO06RSB0 |
| 200 | V _{CC1} B0 |
| 201 | GAC1/IO05RSB0 |
| 202 | GAC0/IO04RSB0 |
| 203 | GAB1/IO03RSB0 |
| 204 | GAB0/IO02RSB0 |
| 205 | GAA1/IO01RSB0 |
| 206 | GAA0/IO00RSB0 |
| 207 | GNDQ |
| 208 | VMV0 |

| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|---------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P400 Function | Pin Number | A3P400 Function | Pin Number | A3P400 Function |
| 1 | GND | 37 | IO141PSB3 | 73 | IO112RSB2 |
| 2 | GAA2/IO155UDB3 | 38 | IO140PDB3 | 74 | IO111RSB2 |
| 3 | IO155VDB3 | 39 | IO140NDB3 | 75 | IO110RSB2 |
| 4 | GAB2/IO154UDB3 | 40 | V _{CC} B3 | 76 | IO109RSB2 |
| 5 | IO154VDB3 | 41 | GND | 77 | IO108RSB2 |
| 6 | GAC2/IO153UDB3 | 42 | IO138PDB3 | 78 | IO107RSB2 |
| 7 | IO153VDB3 | 43 | IO138NDB3 | 79 | IO106RSB2 |
| 8 | IO152UDB3 | 44 | GEC1/IO137PDB3 | 80 | IO104RSB2 |
| 9 | IO152VDB3 | 45 | GEC0/IO137NDB3 | 81 | GND |
| 10 | IO151UDB3 | 46 | GEB1/IO136PDB3 | 82 | IO102RSB2 |
| 11 | IO151VDB3 | 47 | GEB0/IO136NDB3 | 83 | IO101RSB2 |
| 12 | IO150PDB3 | 48 | GEA1/IO135PDB3 | 84 | IO100RSB2 |
| 13 | IO150NDB3 | 49 | GEA0/IO135NDB3 | 85 | IO99RSB2 |
| 14 | IO149PDB3 | 50 | VMV3 | 86 | IO98RSB2 |
| 15 | IO149NDB3 | 51 | GNDQ | 87 | IO97RSB2 |
| 16 | V _{CC} | 52 | GND | 88 | V _{CC} |
| 17 | GND | 53 | VMV2 | 89 | V _{CC} B2 |
| 18 | V _{CC} B3 | 54 | NC | 90 | IO94RSB2 |
| 19 | IO148PDB3 | 55 | GEA2/IO134RSB2 | 91 | IO92RSB2 |
| 20 | IO148NDB3 | 56 | GEB2/IO133RSB2 | 92 | IO90RSB2 |
| 21 | GFC1/IO147PDB3 | 57 | GEC2/IO132RSB2 | 93 | IO88RSB2 |
| 22 | GFC0/IO147NDB3 | 58 | IO131RSB2 | 94 | IO86RSB2 |
| 23 | GFB1/IO146PDB3 | 59 | IO130RSB2 | 95 | IO84RSB2 |
| 24 | GFB0/IO146NDB3 | 60 | IO129RSB2 | 96 | GDC2/IO82RSB2 |
| 25 | V _{CC} PLF | 61 | IO128RSB2 | 97 | GND |
| 26 | GFA0/IO145NPB3 | 62 | V _{CC} B2 | 98 | GDB2/IO81RSB2 |
| 27 | V _{CC} PLF | 63 | IO125RSB2 | 99 | GDA2/IO80RSB2 |
| 28 | GFA1/IO145PPB3 | 64 | IO123RSB2 | 100 | GNDQ |
| 29 | GND | 65 | GND | 101 | TCK |
| 30 | GFA2/IO144PDB3 | 66 | IO121RSB2 | 102 | TDI |
| 31 | IO144NDB3 | 67 | IO119RSB2 | 103 | TMS |
| 32 | GFB2/IO143PDB3 | 68 | IO117RSB2 | 104 | VMV2 |
| 33 | IO143NDB3 | 69 | IO115RSB2 | 105 | GND |
| 34 | GFC2/IO142PDB3 | 70 | IO113RSB2 | 106 | V _{PUMP} |
| 35 | IO142NDB3 | 71 | V _{CC} | 107 | NC |
| 36 | NC | 72 | V _{CC} B2 | 108 | TDO |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P400 Function |
| 109 | TRST |
| 110 | V _{JTAG} |
| 111 | GDA0/IO79VDB1 |
| 112 | GDA1/IO79UDB1 |
| 113 | GDB0/IO78VDB1 |
| 114 | GDB1/IO78UDB1 |
| 115 | GDC0/IO77VDB1 |
| 116 | GDC1/IO77UDB1 |
| 117 | IO76VDB1 |
| 118 | IO76UDB1 |
| 119 | IO75NDB1 |
| 120 | IO75PDB1 |
| 121 | IO74RSB1 |
| 122 | GND |
| 123 | V _{CC1} B1 |
| 124 | NC |
| 125 | NC |
| 126 | V _{CC} |
| 127 | IO72NDB1 |
| 128 | GCC2/IO72PDB1 |
| 129 | GCB2/IO71PSB1 |
| 130 | GND |
| 131 | GCA2/IO70PSB1 |
| 132 | GCA1/IO69PDB1 |
| 133 | GCA0/IO69NDB1 |
| 134 | GCB0/IO68NDB1 |
| 135 | GCB1/IO68PDB1 |
| 136 | GCC0/IO67NDB1 |
| 137 | GCC1/IO67PDB1 |
| 138 | IO66NDB1 |
| 139 | IO66PDB1 |
| 140 | V _{CC1} B1 |
| 141 | GND |
| 142 | V _{CC} |
| 143 | IO65RSB1 |
| 144 | IO64NDB1 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P400 Function |
| 145 | IO64PDB1 |
| 146 | IO63NDB1 |
| 147 | IO63PDB1 |
| 148 | IO62NDB1 |
| 149 | GBC2/IO62PDB1 |
| 150 | IO61NDB1 |
| 151 | GBB2/IO61PDB1 |
| 152 | IO60NDB1 |
| 153 | GBA2/IO60PDB1 |
| 154 | VMV1 |
| 155 | GNDQ |
| 156 | GND |
| 157 | VMV0 |
| 158 | GBA1/IO59RSB0 |
| 159 | GBA0/IO58RSB0 |
| 160 | GBB1/IO57RSB0 |
| 161 | GBB0/IO56RSB0 |
| 162 | GND |
| 163 | GBC1/IO55RSB0 |
| 164 | GBC0/IO54RSB0 |
| 165 | IO52RSB0 |
| 166 | IO49RSB0 |
| 167 | IO46RSB0 |
| 168 | IO43RSB0 |
| 169 | IO40RSB0 |
| 170 | V _{CC1} B0 |
| 171 | V _{CC} |
| 172 | IO36RSB0 |
| 173 | IO35RSB0 |
| 174 | IO34RSB0 |
| 175 | IO33RSB0 |
| 176 | IO32RSB0 |
| 177 | IO31RSB0 |
| 178 | GND |
| 179 | IO29RSB0 |
| 180 | IO28RSB0 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P400 Function |
| 181 | IO27RSB0 |
| 182 | IO26RSB0 |
| 183 | IO25RSB0 |
| 184 | IO24RSB0 |
| 185 | IO23RSB0 |
| 186 | V _{CC1} B0 |
| 187 | V _{CC} |
| 188 | IO21RSB0 |
| 189 | IO20RSB0 |
| 190 | IO19RSB0 |
| 191 | IO18RSB0 |
| 192 | IO17RSB0 |
| 193 | IO16RSB0 |
| 194 | IO15RSB0 |
| 195 | GND |
| 196 | IO13RSB0 |
| 197 | IO11RSB0 |
| 198 | IO09RSB0 |
| 199 | IO07RSB0 |
| 200 | V _{CC1} B0 |
| 201 | GAC1/IO05RSB0 |
| 202 | GAC0/IO04RSB0 |
| 203 | GAB1/IO03RSB0 |
| 204 | GAB0/IO02RSB0 |
| 205 | GAA1/IO01RSB0 |
| 206 | GAA0/IO00RSB0 |
| 207 | GNDQ |
| 208 | VMV0 |

| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|---------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| 1 | GND | 37 | IO152PDB3 | 73 | IO120RSB2 |
| 2 | GAA2/IO174PDB3 | 38 | IO152NDB3 | 74 | IO119RSB2 |
| 3 | IO174NDB3 | 39 | IO150PSB3 | 75 | IO118RSB2 |
| 4 | GAB2/IO173PDB3 | 40 | V _{CC} B3 | 76 | IO117RSB2 |
| 5 | IO173NDB3 | 41 | GND | 77 | IO116RSB2 |
| 6 | GAC2/IO172PDB3 | 42 | IO147PDB3 | 78 | IO115RSB2 |
| 7 | IO172NDB3 | 43 | IO147NDB3 | 79 | IO114RSB2 |
| 8 | IO171PDB3 | 44 | GEC1/IO146PDB3 | 80 | IO112RSB2 |
| 9 | IO171NDB3 | 45 | GEC0/IO146NDB3 | 81 | GND |
| 10 | IO170PDB3 | 46 | GEB1/IO145PDB3 | 82 | IO111RSB2 |
| 11 | IO170NDB3 | 47 | GEB0/IO145NDB3 | 83 | IO110RSB2 |
| 12 | IO169PDB3 | 48 | GEA1/IO144PDB3 | 84 | IO109RSB2 |
| 13 | IO169NDB3 | 49 | GEA0/IO144NDB3 | 85 | IO108RSB2 |
| 14 | IO168PDB3 | 50 | VMV3 | 86 | IO107RSB2 |
| 15 | IO168NDB3 | 51 | GNDQ | 87 | IO106RSB2 |
| 16 | V _{CC} | 52 | GND | 88 | V _{CC} |
| 17 | GND | 53 | VMV2 | 89 | V _{CC} B2 |
| 18 | V _{CC} B3 | 54 | GEA2/IO143RSB2 | 90 | IO104RSB2 |
| 19 | IO166PDB3 | 55 | GEB2/IO142RSB2 | 91 | IO102RSB2 |
| 20 | IO166NDB3 | 56 | GEC2/IO141RSB2 | 92 | IO100RSB2 |
| 21 | GFC1/IO164PDB3 | 57 | IO140RSB2 | 93 | IO98RSB2 |
| 22 | GFC0/IO164NDB3 | 58 | IO139RSB2 | 94 | IO96RSB2 |
| 23 | GFB1/IO163PDB3 | 59 | IO138RSB2 | 95 | IO92RSB2 |
| 24 | GFB0/IO163NDB3 | 60 | IO137RSB2 | 96 | GDC2/IO91RSB2 |
| 25 | V _{COMPLF} | 61 | IO136RSB2 | 97 | GND |
| 26 | GFA0/IO162NPB3 | 62 | V _{CC} B2 | 98 | GDB2/IO90RSB2 |
| 27 | V _{CC} PLF | 63 | IO135RSB2 | 99 | GDA2/IO89RSB2 |
| 28 | GFA1/IO162PPB3 | 64 | IO133RSB2 | 100 | GNDQ |
| 29 | GND | 65 | GND | 101 | TCK |
| 30 | GFA2/IO161PDB3 | 66 | IO131RSB2 | 102 | TDI |
| 31 | IO161NDB3 | 67 | IO129RSB2 | 103 | TMS |
| 32 | GFB2/IO160PDB3 | 68 | IO127RSB2 | 104 | VMV2 |
| 33 | IO160NDB3 | 69 | IO125RSB2 | 105 | GND |
| 34 | GFC2/IO159PDB3 | 70 | IO123RSB2 | 106 | V _{PUMP} |
| 35 | IO159NDB3 | 71 | V _{CC} | 107 | GNDQ |
| 36 | V _{CC} | 72 | V _{CC} B2 | 108 | TDO |

| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|---------------------|--------------|---------------------|--------------|---------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| 109 | TRST | 145 | IO64PDB1 | 181 | IO27RSB0 |
| 110 | V _{JTAG} | 146 | IO63NDB1 | 182 | IO26RSB0 |
| 111 | GDA0/IO88NDB1 | 147 | IO63PDB1 | 183 | IO25RSB0 |
| 112 | GDA1/IO88PDB1 | 148 | IO62NDB1 | 184 | IO24RSB0 |
| 113 | GDB0/IO87NDB1 | 149 | GBC2/IO62PDB1 | 185 | IO23RSB0 |
| 114 | GDB1/IO87PDB1 | 150 | IO61NDB1 | 186 | V _{CCi} B0 |
| 115 | GDC0/IO86NDB1 | 151 | GBB2/IO61PDB1 | 187 | V _{CC} |
| 116 | GDC1/IO86PDB1 | 152 | IO60NDB1 | 188 | IO20RSB0 |
| 117 | IO84NDB1 | 153 | GBA2/IO60PDB1 | 189 | IO19RSB0 |
| 118 | IO84PDB1 | 154 | VMV1 | 190 | IO18RSB0 |
| 119 | IO82NDB1 | 155 | GNDQ | 191 | IO17RSB0 |
| 120 | IO82PDB1 | 156 | GND | 192 | IO16RSB0 |
| 121 | IO81PSB1 | 157 | VMV0 | 193 | IO14RSB0 |
| 122 | GND | 158 | GBA1/IO59RSB0 | 194 | IO12RSB0 |
| 123 | V _{CCi} B1 | 159 | GBA0/IO58RSB0 | 195 | GND |
| 124 | IO77NDB1 | 160 | GBB1/IO57RSB0 | 196 | IO10RSB0 |
| 125 | IO77PDB1 | 161 | GBB0/IO56RSB0 | 197 | IO09RSB0 |
| 126 | NC | 162 | GND | 198 | IO08RSB0 |
| 127 | IO74NDB1 | 163 | GBC1/IO55RSB0 | 199 | IO07RSB0 |
| 128 | GCC2/IO74PDB1 | 164 | GBC0/IO54RSB0 | 200 | V _{CCi} B0 |
| 129 | GCB2/IO73PSB1 | 165 | IO52RSB0 | 201 | GAC1/IO05RSB0 |
| 130 | GND | 166 | IO50RSB0 | 202 | GAC0/IO04RSB0 |
| 131 | GCA2/IO72PSB1 | 167 | IO48RSB0 | 203 | GAB1/IO03RSB0 |
| 132 | GCA1/IO71PDB1 | 168 | IO46RSB0 | 204 | GAB0/IO02RSB0 |
| 133 | GCA0/IO71NDB1 | 169 | IO44RSB0 | 205 | GAA1/IO01RSB0 |
| 134 | GCB0/IO70NDB1 | 170 | V _{CCi} B0 | 206 | GAA0/IO00RSB0 |
| 135 | GCB1/IO70PDB1 | 171 | V _{CC} | 207 | GNDQ |
| 136 | GCC0/IO69NDB1 | 172 | IO36RSB0 | 208 | VMV0 |
| 137 | GCC1/IO69PDB1 | 173 | IO35RSB0 | | |
| 138 | IO67NDB1 | 174 | IO34RSB0 | | |
| 139 | IO67PDB1 | 175 | IO33RSB0 | | |
| 140 | V _{CCi} B1 | 176 | IO32RSB0 | | |
| 141 | GND | 177 | IO31RSB0 | | |
| 142 | V _{CC} | 178 | GND | | |
| 143 | IO65PSB1 | 179 | IO29RSB0 | | |
| 144 | IO64NDB1 | 180 | IO28RSB0 | | |

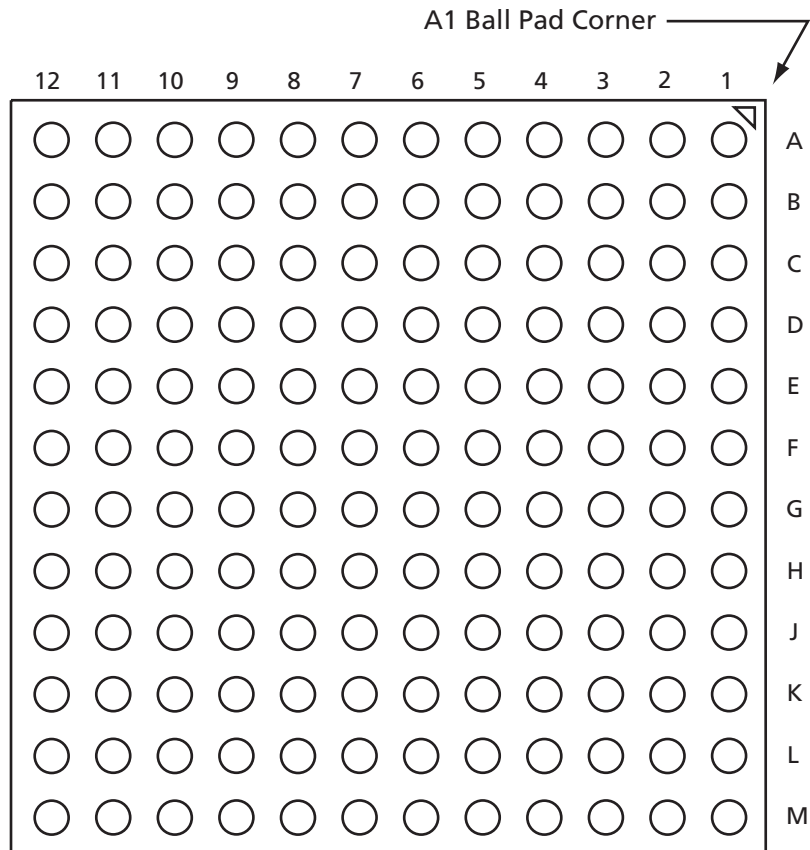
| 208-Pin PQFP | | 208-Pin PQFP | | 208-Pin PQFP | |
|--------------|---------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P1000 Function | Pin Number | A3P1000 Function | Pin Number | A3P1000 Function |
| 1 | GND | 37 | IO199PDB3 | 73 | IO162RSB2 |
| 2 | GAA2/IO225PDB3 | 38 | IO199NDB3 | 74 | IO160RSB2 |
| 3 | IO225NDB3 | 39 | IO197PSB3 | 75 | IO158RSB2 |
| 4 | GAB2/IO224PDB3 | 40 | V _{CC} B3 | 76 | IO156RSB2 |
| 5 | IO224NDB3 | 41 | GND | 77 | IO154RSB2 |
| 6 | GAC2/IO223PDB3 | 42 | IO191PDB3 | 78 | IO152RSB2 |
| 7 | IO223NDB3 | 43 | IO191NDB3 | 79 | IO150RSB2 |
| 8 | IO222PDB3 | 44 | GEC1/IO190PDB3 | 80 | IO148RSB2 |
| 9 | IO222NDB3 | 45 | GEC0/IO190NDB3 | 81 | GND |
| 10 | IO220PDB3 | 46 | GEB1/IO189PDB3 | 82 | IO143RSB2 |
| 11 | IO220NDB3 | 47 | GEB0/IO189NDB3 | 83 | IO141RSB2 |
| 12 | IO218PDB3 | 48 | GEA1/IO188PDB3 | 84 | IO139RSB2 |
| 13 | IO218NDB3 | 49 | GEA0/IO188NDB3 | 85 | IO137RSB2 |
| 14 | IO216PDB3 | 50 | VMV3 | 86 | IO135RSB2 |
| 15 | IO216NDB3 | 51 | GNDQ | 87 | IO133RSB2 |
| 16 | V _{CC} | 52 | GND | 88 | V _{CC} |
| 17 | GND | 53 | VMV2 | 89 | V _{CC} B2 |
| 18 | V _{CC} B3 | 54 | GEA2/IO187RSB2 | 90 | IO128RSB2 |
| 19 | IO212PDB3 | 55 | GEB2/IO186RSB2 | 91 | IO126RSB2 |
| 20 | IO212NDB3 | 56 | GEC2/IO185RSB2 | 92 | IO124RSB2 |
| 21 | GFC1/IO209PDB3 | 57 | IO184RSB2 | 93 | IO122RSB2 |
| 22 | GFC0/IO209NDB3 | 58 | IO183RSB2 | 94 | IO120RSB2 |
| 23 | GFB1/IO208PDB3 | 59 | IO182RSB2 | 95 | IO118RSB2 |
| 24 | GFB0/IO208NDB3 | 60 | IO181RSB2 | 96 | GDC2/IO116RSB2 |
| 25 | V _{CC} PLF | 61 | IO180RSB2 | 97 | GND |
| 26 | GFA0/IO207NPB3 | 62 | V _{CC} B2 | 98 | GDB2/IO115RSB2 |
| 27 | V _{CC} PLF | 63 | IO178RSB2 | 99 | GDA2/IO114RSB2 |
| 28 | GFA1/IO207PPB3 | 64 | IO176RSB2 | 100 | GNDQ |
| 29 | GND | 65 | GND | 101 | TCK |
| 30 | GFA2/IO206PDB3 | 66 | IO174RSB2 | 102 | TDI |
| 31 | IO206NDB3 | 67 | IO172RSB2 | 103 | TMS |
| 32 | GFB2/IO205PDB3 | 68 | IO170RSB2 | 104 | VMV2 |
| 33 | IO205NDB3 | 69 | IO168RSB2 | 105 | GND |
| 34 | GFC2/IO204PDB3 | 70 | IO166RSB2 | 106 | V _{PUMP} |
| 35 | IO204NDB3 | 71 | V _{CC} | 107 | GNDQ |
| 36 | V _{CC} | 72 | V _{CC} B2 | 108 | TDO |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P1000 Function |
| 109 | TRST |
| 110 | V _{JTAG} |
| 111 | GDA0/IO113NDB1 |
| 112 | GDA1/IO113PDB1 |
| 113 | GDB0/IO112NDB1 |
| 114 | GDB1/IO112PDB1 |
| 115 | GDC0/IO111NDB1 |
| 116 | GDC1/IO111PDB1 |
| 117 | IO109NDB1 |
| 118 | IO109PDB1 |
| 119 | IO106NDB1 |
| 120 | IO106PDB1 |
| 121 | IO104PSB1 |
| 122 | GND |
| 123 | V _{CC1} B1 |
| 124 | IO99NDB1 |
| 125 | IO99PDB1 |
| 126 | NC |
| 127 | IO96NDB1 |
| 128 | GCC2/IO96PDB1 |
| 129 | GCB2/IO95PSB1 |
| 130 | GND |
| 131 | GCA2/IO94PSB1 |
| 132 | GCA1/IO93PDB1 |
| 133 | GCA0/IO93NDB1 |
| 134 | GCB0/IO92NDB1 |
| 135 | GCB1/IO92PDB1 |
| 136 | GCC0/IO91NDB1 |
| 137 | GCC1/IO91PDB1 |
| 138 | IO88NDB1 |
| 139 | IO88PDB1 |
| 140 | V _{CC1} B1 |
| 141 | GND |
| 142 | V _{CC} |
| 143 | IO86PSB1 |
| 144 | IO84NDB1 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P1000 Function |
| 145 | IO84PDB1 |
| 146 | IO82NDB1 |
| 147 | IO82PDB1 |
| 148 | IO80NDB1 |
| 149 | GBC2/IO80PDB1 |
| 150 | IO79NDB1 |
| 151 | GBB2/IO79PDB1 |
| 152 | IO78NDB1 |
| 153 | GBA2/IO78PDB1 |
| 154 | VMV1 |
| 155 | GNDQ |
| 156 | GND |
| 157 | VMV0 |
| 158 | GBA1/IO77RSB0 |
| 159 | GBA0/IO76RSB0 |
| 160 | GBB1/IO75RSB0 |
| 161 | GBB0/IO74RSB0 |
| 162 | GND |
| 163 | GBC1/IO73RSB0 |
| 164 | GBC0/IO72RSB0 |
| 165 | IO70RSB0 |
| 166 | IO67RSB0 |
| 167 | IO63RSB0 |
| 168 | IO60RSB0 |
| 169 | IO57RSB0 |
| 170 | V _{CC1} B0 |
| 171 | V _{CC} |
| 172 | IO54RSB0 |
| 173 | IO51RSB0 |
| 174 | IO48RSB0 |
| 175 | IO45RSB0 |
| 176 | IO42RSB0 |
| 177 | IO40RSB0 |
| 178 | GND |
| 179 | IO38RSB0 |
| 180 | IO35RSB0 |

| 208-Pin PQFP | |
|--------------|---------------------|
| Pin Number | A3P1000 Function |
| 181 | IO33RSB0 |
| 182 | IO31RSB0 |
| 183 | IO29RSB0 |
| 184 | IO27RSB0 |
| 185 | IO25RSB0 |
| 186 | V _{CC1} B0 |
| 187 | V _{CC} |
| 188 | IO22RSB0 |
| 189 | IO20RSB0 |
| 190 | IO18RSB0 |
| 191 | IO16RSB0 |
| 192 | IO15RSB0 |
| 193 | IO14RSB0 |
| 194 | IO13RSB0 |
| 195 | GND |
| 196 | IO12RSB0 |
| 197 | IO11RSB0 |
| 198 | IO10RSB0 |
| 199 | IO09RSB0 |
| 200 | V _{CC1} B0 |
| 201 | GAC1/IO05RSB0 |
| 202 | GAC0/IO04RSB0 |
| 203 | GAB1/IO03RSB0 |
| 204 | GAB0/IO02RSB0 |
| 205 | GAA1/IO01RSB0 |
| 206 | GAA0/IO00RSB0 |
| 207 | GNDQ |
| 208 | VMV0 |

144-Pin FBGA



Note: This is the bottom view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 144-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P060 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO04RSB0 |
| A4 | GAB1/IO05RSB0 |
| A5 | IO08RSB0 |
| A6 | GND |
| A7 | IO11RSB0 |
| A8 | V _{CC} |
| A9 | IO16RSB0 |
| A10 | GBA0/IO23RSB0 |
| A11 | GBA1/IO24RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO53RSB1 |
| B2 | GND |
| B3 | GAA0/IO02RSB0 |
| B4 | GAA1/IO03RSB0 |
| B5 | IO00RSB0 |
| B6 | IO10RSB0 |
| B7 | IO12RSB0 |
| B8 | IO14RSB0 |
| B9 | GBB0/IO21RSB0 |
| B10 | GBB1/IO22RSB0 |
| B11 | GND |
| B12 | VMV0 |
| C1 | IO95RSB1 |
| C2 | GFA2/IO83RSB1 |
| C3 | GAC2/IO94RSB1 |
| C4 | V _{CC} |
| C5 | IO01RSB0 |
| C6 | IO09RSB0 |
| C7 | IO13RSB0 |
| C8 | IO15RSB0 |
| C9 | IO17RSB0 |
| C10 | GBA2/IO25RSB0 |
| C11 | IO26RSB0 |
| C12 | GBC2/IO29RSB0 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P060 Function |
| D1 | IO91RSB1 |
| D2 | IO92RSB1 |
| D3 | IO93RSB1 |
| D4 | GAA2/IO51RSB1 |
| D5 | GAC0/IO06RSB0 |
| D6 | GAC1/IO07RSB0 |
| D7 | GBC0/IO19RSB0 |
| D8 | GBC1/IO20RSB0 |
| D9 | GBB2/IO27RSB0 |
| D10 | IO18RSB0 |
| D11 | IO28RSB0 |
| D12 | GCB1/IO37RSB0 |
| E1 | V _{CC} |
| E2 | GFC0/IO88RSB1 |
| E3 | GFC1/IO89RSB1 |
| E4 | V _{CC} B1 |
| E5 | IO52RSB1 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO35RSB0 |
| E9 | V _{CC} B0 |
| E10 | V _{CC} |
| E11 | GCA0/IO40RSB0 |
| E12 | IO30RSB0 |
| F1 | GFB0/IO86RSB1 |
| F2 | V _{COMPLF} |
| F3 | GFB1/IO87RSB1 |
| F4 | IO90RSB1 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO36RSB0 |
| F9 | GCB0/IO38RSB0 |
| F10 | GND |
| F11 | GCA1/IO39RSB0 |
| F12 | GCA2/IO41RSB0 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P060 Function |
| G1 | GFA1/IO84RSB1 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO85RSB1 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO45RSB0 |
| G9 | IO32RSB0 |
| G10 | GCC2/IO43RSB0 |
| G11 | IO31RSB0 |
| G12 | GCB2/IO42RSB0 |
| H1 | V _{CC} |
| H2 | GFB2/IO82RSB1 |
| H3 | GFC2/IO81RSB1 |
| H4 | GEC1/IO77RSB1 |
| H5 | V _{CC} |
| H6 | IO34RSB0 |
| H7 | IO44RSB0 |
| H8 | GDB2/IO55RSB1 |
| H9 | GDC0/IO46RSB0 |
| H10 | V _{CC} B0 |
| H11 | IO33RSB0 |
| H12 | V _{CC} |
| J1 | GEB1/IO75RSB1 |
| J2 | IO78RSB1 |
| J3 | V _{CC} B1 |
| J4 | GEC0/IO76RSB1 |
| J5 | IO79RSB1 |
| J6 | IO80RSB1 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO54RSB1 |
| J10 | TDO |
| J11 | GDA1/IO49RSB0 |
| J12 | GDB1/IO47RSB0 |

| 144-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P060 Function |
| K1 | GEB0/IO74RSB1 |
| K2 | GEA1/IO73RSB1 |
| K3 | GEA0/IO72RSB1 |
| K4 | GEA2/IO71RSB1 |
| K5 | IO65RSB1 |
| K6 | IO64RSB1 |
| K7 | GND |
| K8 | IO57RSB1 |
| K9 | GDC2/IO56RSB1 |
| K10 | GND |
| K11 | GDA0/IO50RSB0 |
| K12 | GDB0/IO48RSB0 |
| L1 | GND |
| L2 | VMV1 |
| L3 | GEB2/IO70RSB1 |
| L4 | IO67RSB1 |
| L5 | V _{CC} B1 |
| L6 | IO62RSB1 |
| L7 | IO59RSB1 |
| L8 | IO58RSB1 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV1 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO69RSB1 |
| M3 | IO68RSB1 |
| M4 | IO66RSB1 |
| M5 | IO63RSB1 |
| M6 | IO61RSB1 |
| M7 | IO60RSB1 |
| M8 | NC |
| M9 | TDI |
| M10 | V _{CC} B1 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

| 144-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P125 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO02RSB0 |
| A4 | GAB1/IO03RSB0 |
| A5 | IO11RSB0 |
| A6 | GND |
| A7 | IO18RSB0 |
| A8 | V _{CC} |
| A9 | IO25RSB0 |
| A10 | GBA0/IO39RSB0 |
| A11 | GBA1/IO40RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO69RSB1 |
| B2 | GND |
| B3 | GAA0/IO00RSB0 |
| B4 | GAA1/IO01RSB0 |
| B5 | IO08RSB0 |
| B6 | IO14RSB0 |
| B7 | IO19RSB0 |
| B8 | IO22RSB0 |
| B9 | GBB0/IO37RSB0 |
| B10 | GBB1/IO38RSB0 |
| B11 | GND |
| B12 | VMV0 |
| C1 | IO132RSB1 |
| C2 | GFA2/IO120RSB1 |
| C3 | GAC2/IO131RSB1 |
| C4 | V _{CC} |
| C5 | IO10RSB0 |
| C6 | IO12RSB0 |
| C7 | IO21RSB0 |
| C8 | IO24RSB0 |
| C9 | IO27RSB0 |
| C10 | GBA2/IO41RSB0 |
| C11 | IO42RSB0 |
| C12 | GBC2/IO45RSB0 |

| 144-Pin FBGA | |
|--------------|------------------------|
| Pin Number | A3P125 Function |
| D1 | IO128RSB1 |
| D2 | IO129RSB1 |
| D3 | IO130RSB1 |
| D4 | GAA2/IO67RSB1 |
| D5 | GAC0/IO04RSB0 |
| D6 | GAC1/IO05RSB0 |
| D7 | GBC0/IO35RSB0 |
| D8 | GBC1/IO36RSB0 |
| D9 | GBB2/IO43RSB0 |
| D10 | IO28RSB0 |
| D11 | IO44RSB0 |
| D12 | GCB1/IO53RSB0 |
| E1 | V _{CC} |
| E2 | GFC0/IO125RSB1 |
| E3 | GFC1/IO126RSB1 |
| E4 | V _{CC} B1 |
| E5 | IO68RSB1 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO51RSB0 |
| E9 | V _{CC} B0 |
| E10 | V _{CC} |
| E11 | GCA0/IO56RSB0 |
| E12 | IO46RSB0 |
| F1 | GFB0/IO123RSB1 |
| F2 | V _{CC} COMPLF |
| F3 | GFB1/IO124RSB1 |
| F4 | IO127RSB1 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO52RSB0 |
| F9 | GCB0/IO54RSB0 |
| F10 | GND |
| F11 | GCA1/IO55RSB0 |
| F12 | GCA2/IO57RSB0 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| G1 | GFA1/IO121RSB1 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO122RSB1 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO61RSB0 |
| G9 | IO48RSB0 |
| G10 | GCC2/IO59RSB0 |
| G11 | IO47RSB0 |
| G12 | GCB2/IO58RSB0 |
| H1 | V _{CC} |
| H2 | GFB2/IO119RSB1 |
| H3 | GFC2/IO118RSB1 |
| H4 | GEC1/IO112RSB1 |
| H5 | V _{CC} |
| H6 | IO50RSB0 |
| H7 | IO60RSB0 |
| H8 | GDB2/IO71RSB1 |
| H9 | GDC0/IO62RSB0 |
| H10 | V _{CC} B0 |
| H11 | IO49RSB0 |
| H12 | V _{CC} |
| J1 | GEB1/IO110RSB1 |
| J2 | IO115RSB1 |
| J3 | V _{CC} B1 |
| J4 | GEC0/IO111RSB1 |
| J5 | IO116RSB1 |
| J6 | IO117RSB1 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO70RSB1 |
| J10 | TDO |
| J11 | GDA1/IO65RSB0 |
| J12 | GDB1/IO63RSB0 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P125 Function |
| K1 | GEB0/IO109RSB1 |
| K2 | GEA1/IO108RSB1 |
| K3 | GEA0/IO107RSB1 |
| K4 | GEA2/IO106RSB1 |
| K5 | IO100RSB1 |
| K6 | IO98RSB1 |
| K7 | GND |
| K8 | IO73RSB1 |
| K9 | GDC2/IO72RSB1 |
| K10 | GND |
| K11 | GDA0/IO66RSB0 |
| K12 | GDB0/IO64RSB0 |
| L1 | GND |
| L2 | VMV1 |
| L3 | GEB2/IO105RSB1 |
| L4 | IO102RSB1 |
| L5 | V _{CCI} B1 |
| L6 | IO95RSB1 |
| L7 | IO85RSB1 |
| L8 | IO74RSB1 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV1 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO104RSB1 |
| M3 | IO103RSB1 |
| M4 | IO101RSB1 |
| M5 | IO97RSB1 |
| M6 | IO94RSB1 |
| M7 | IO86RSB1 |
| M8 | IO75RSB1 |
| M9 | TDI |
| M10 | V _{CCI} B1 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

| 144-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P250 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO02RSB0 |
| A4 | GAB1/IO03RSB0 |
| A5 | IO16RSB0 |
| A6 | GND |
| A7 | IO29RSB0 |
| A8 | V _{CC} |
| A9 | IO33RSB0 |
| A10 | GBA0/IO39RSB0 |
| A11 | GBA1/IO40RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO117UDB3 |
| B2 | GND |
| B3 | GAA0/IO00RSB0 |
| B4 | GAA1/IO01RSB0 |
| B5 | IO14RSB0 |
| B6 | IO19RSB0 |
| B7 | IO22RSB0 |
| B8 | IO30RSB0 |
| B9 | GBB0/IO37RSB0 |
| B10 | GBB1/IO38RSB0 |
| B11 | GND |
| B12 | VMV1 |
| C1 | IO117VDB3 |
| C2 | GFA2/IO107PPB3 |
| C3 | GAC2/IO116UDB3 |
| C4 | V _{CC} |
| C5 | IO12RSB0 |
| C6 | IO17RSB0 |
| C7 | IO24RSB0 |
| C8 | IO31RSB0 |
| C9 | IO34RSB0 |
| C10 | GBA2/IO41PDB1 |
| C11 | IO41NDB1 |
| C12 | GBC2/IO43PPB1 |

| 144-Pin FBGA | |
|--------------|------------------------|
| Pin Number | A3P250 Function |
| D1 | IO112NDB3 |
| D2 | IO112PDB3 |
| D3 | IO116VDB3 |
| D4 | GAA2/IO118UPB3 |
| D5 | GAC0/IO04RSB0 |
| D6 | GAC1/IO05RSB0 |
| D7 | GBC0/IO35RSB0 |
| D8 | GBC1/IO36RSB0 |
| D9 | GBB2/IO42PDB1 |
| D10 | IO42NDB1 |
| D11 | IO43NPB1 |
| D12 | GCB1/IO49PPB1 |
| E1 | V _{CC} |
| E2 | GFC0/IO110NDB3 |
| E3 | GFC1/IO110PDB3 |
| E4 | V _{CC} B3 |
| E5 | IO118VPB3 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO48PDB1 |
| E9 | V _{CC} B1 |
| E10 | V _{CC} |
| E11 | GCA0/IO50NDB1 |
| E12 | IO51NDB1 |
| F1 | GFB0/IO109NPB3 |
| F2 | V _{CC} COMPLF |
| F3 | GFB1/IO109PPB3 |
| F4 | IO107NPB3 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO48NDB1 |
| F9 | GCB0/IO49NPB1 |
| F10 | GND |
| F11 | GCA1/IO50PDB1 |
| F12 | GCA2/IO51PDB1 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| G1 | GFA1/IO108PPB3 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO108NPB3 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO58UPB1 |
| G9 | IO53NDB1 |
| G10 | GCC2/IO53PDB1 |
| G11 | IO52NDB1 |
| G12 | GCB2/IO52PDB1 |
| H1 | V _{CC} |
| H2 | GFB2/IO106PDB3 |
| H3 | GFC2/IO105PSB3 |
| H4 | GEC1/IO100PDB3 |
| H5 | V _{CC} |
| H6 | IO79RSB2 |
| H7 | IO65RSB2 |
| H8 | GDB2/IO62RSB2 |
| H9 | GDC0/IO58VPB1 |
| H10 | V _{CC} B1 |
| H11 | IO54PSB1 |
| H12 | V _{CC} |
| J1 | GEB1/IO99PDB3 |
| J2 | IO106NDB3 |
| J3 | V _{CC} B3 |
| J4 | GEC0/IO100NDB3 |
| J5 | IO88RSB2 |
| J6 | IO81RSB2 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO61RSB2 |
| J10 | TDO |
| J11 | GDA1/IO60UDB1 |
| J12 | GDB1/IO59UDB1 |

| 144-Pin FBGA | |
|--------------|----------------------|
| Pin Number | A3P250 Function |
| K1 | GEB0/IO99NDB3 |
| K2 | GEA1/IO98PDB3 |
| K3 | GEA0/IO98NDB3 |
| K4 | GEA2/IO97RSB2 |
| K5 | IO90RSB2 |
| K6 | IO84RSB2 |
| K7 | GND |
| K8 | IO66RSB2 |
| K9 | GDC2/IO63RSB2 |
| K10 | GND |
| K11 | GDA0/IO60VDB1 |
| K12 | GDB0/IO59VDB1 |
| L1 | GND |
| L2 | VMV3 |
| L3 | GEB2/IO96RSB2 |
| L4 | IO91RSB2 |
| L5 | V _{CC} I B2 |
| L6 | IO82RSB2 |
| L7 | IO80RSB2 |
| L8 | IO72RSB2 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV2 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO95RSB2 |
| M3 | IO92RSB2 |
| M4 | IO89RSB2 |
| M5 | IO87RSB2 |
| M6 | IO85RSB2 |
| M7 | IO78RSB2 |
| M8 | IO76RSB2 |
| M9 | TDI |
| M10 | V _{CC} I B2 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

| 144-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P400 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO02RSB0 |
| A4 | GAB1/IO03RSB0 |
| A5 | IO16RSB0 |
| A6 | GND |
| A7 | IO30RSB0 |
| A8 | V _{CC} |
| A9 | IO34RSB0 |
| A10 | GBA0/IO58RSB0 |
| A11 | GBA1/IO59RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO154UDB3 |
| B2 | GND |
| B3 | GAA0/IO00RSB0 |
| B4 | GAA1/IO01RSB0 |
| B5 | IO14RSB0 |
| B6 | IO19RSB0 |
| B7 | IO23RSB0 |
| B8 | IO31RSB0 |
| B9 | GBB0/IO56RSB0 |
| B10 | GBB1/IO57RSB0 |
| B11 | GND |
| B12 | VMV1 |
| C1 | IO154VDB3 |
| C2 | GFA2/IO144PPB3 |
| C3 | GAC2/IO153UDB3 |
| C4 | V _{CC} |
| C5 | IO12RSB0 |
| C6 | IO17RSB0 |
| C7 | IO25RSB0 |
| C8 | IO32RSB0 |
| C9 | IO53RSB0 |
| C10 | GBA2/IO60PDB1 |
| C11 | IO60NDB1 |
| C12 | GBC2/IO62PPB1 |

| 144-Pin FBGA | |
|--------------|-----------------------|
| Pin Number | A3P400 Function |
| D1 | IO149NDB3 |
| D2 | IO149PDB3 |
| D3 | IO153VDB3 |
| D4 | GAA2/IO155UPB3 |
| D5 | GAC0/IO04RSB0 |
| D6 | GAC1/IO05RSB0 |
| D7 | GBC0/IO54RSB0 |
| D8 | GBC1/IO55RSB0 |
| D9 | GBB2/IO61PDB1 |
| D10 | IO61NDB1 |
| D11 | IO62NPB1 |
| D12 | GCB1/IO68PPB1 |
| E1 | V _{CC} |
| E2 | GFC0/IO147NDB3 |
| E3 | GFC1/IO147PDB3 |
| E4 | V _{CC} B3 |
| E5 | IO155VPB3 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO67PDB1 |
| E9 | V _{CC} B1 |
| E10 | V _{CC} |
| E11 | GCA0/IO69NDB1 |
| E12 | IO70NDB1 |
| F1 | GFB0/IO146NPB3 |
| F2 | V _{CC} OMPLF |
| F3 | GFB1/IO146PPB3 |
| F4 | IO144NPB3 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO67NDB1 |
| F9 | GCB0/IO68NPB1 |
| F10 | GND |
| F11 | GCA1/IO69PDB1 |
| F12 | GCA2/IO70PDB1 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P400 Function |
| G1 | GFA1/IO145PPB3 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO145NPB3 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO77UPB1 |
| G9 | IO72NDB1 |
| G10 | GCC2/IO72PDB1 |
| G11 | IO71NDB1 |
| G12 | GCB2/IO71PDB1 |
| H1 | V _{CC} |
| H2 | GFB2/IO143PDB3 |
| H3 | GFC2/IO142PSB3 |
| H4 | GEC1/IO137PDB3 |
| H5 | V _{CC} |
| H6 | IO75PDB1 |
| H7 | IO75NDB1 |
| H8 | GDB2/IO81RSB2 |
| H9 | GDC0/IO77VPB1 |
| H10 | V _{CC} B1 |
| H11 | IO73PSB1 |
| H12 | V _{CC} |
| J1 | GEB1/IO136PDB3 |
| J2 | IO143NDB3 |
| J3 | V _{CC} B3 |
| J4 | GEC0/IO137NDB3 |
| J5 | IO125RSB2 |
| J6 | IO116RSB2 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO80RSB2 |
| J10 | TDO |
| J11 | GDA1/IO79UDB1 |
| J12 | GDB1/IO78UDB1 |

| 144-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| K1 | GEB0/IO136NDB3 |
| K2 | GEA1/IO135PDB3 |
| K3 | GEA0/IO135NDB3 |
| K4 | GEA2/IO134RSB2 |
| K5 | IO127RSB2 |
| K6 | IO121RSB2 |
| K7 | GND |
| K8 | IO104RSB2 |
| K9 | GDC2/IO82RSB2 |
| K10 | GND |
| K11 | GDA0/IO79VDB1 |
| K12 | GDB0/IO78VDB1 |
| L1 | GND |
| L2 | VMV3 |
| L3 | GEB2/IO133RSB2 |
| L4 | IO128RSB2 |
| L5 | V _{CC} B2 |
| L6 | IO119RSB2 |
| L7 | IO114RSB2 |
| L8 | IO110RSB2 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV2 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO132RSB2 |
| M3 | IO129RSB2 |
| M4 | IO126RSB2 |
| M5 | IO124RSB2 |
| M6 | IO122RSB2 |
| M7 | IO117RSB2 |
| M8 | IO115RSB2 |
| M9 | TDI |
| M10 | V _{CC} B2 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

| 144-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P600 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO02RSB0 |
| A4 | GAB1/IO03RSB0 |
| A5 | IO10RSB0 |
| A6 | GND |
| A7 | IO34RSB0 |
| A8 | V _{CC} |
| A9 | IO50RSB0 |
| A10 | GBA0/IO58RSB0 |
| A11 | GBA1/IO59RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO173PDB3 |
| B2 | GND |
| B3 | GAA0/IO00RSB0 |
| B4 | GAA1/IO01RSB0 |
| B5 | IO13RSB0 |
| B6 | IO19RSB0 |
| B7 | IO31RSB0 |
| B8 | IO39RSB0 |
| B9 | GBB0/IO56RSB0 |
| B10 | GBB1/IO57RSB0 |
| B11 | GND |
| B12 | VMV1 |
| C1 | IO173NDB3 |
| C2 | GFA2/IO161PPB3 |
| C3 | GAC2/IO172PDB3 |
| C4 | V _{CC} |
| C5 | IO16RSB0 |
| C6 | IO25RSB0 |
| C7 | IO28RSB0 |
| C8 | IO42RSB0 |
| C9 | IO45RSB0 |
| C10 | GBA2/IO60PDB1 |
| C11 | IO60NDB1 |
| C12 | GBC2/IO62PPB1 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P600 Function |
| D1 | IO169PDB3 |
| D2 | IO169NDB3 |
| D3 | IO172NDB3 |
| D4 | GAA2/IO174PPB3 |
| D5 | GAC0/IO04RSB0 |
| D6 | GAC1/IO05RSB0 |
| D7 | GBC0/IO54RSB0 |
| D8 | GBC1/IO55RSB0 |
| D9 | GBB2/IO61PDB1 |
| D10 | IO61NDB1 |
| D11 | IO62NPB1 |
| D12 | GCB1/IO70PPB1 |
| E1 | V _{CC} |
| E2 | GFC0/IO164NDB3 |
| E3 | GFC1/IO164PDB3 |
| E4 | V _{CC} B3 |
| E5 | IO174NPB3 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO69PDB1 |
| E9 | V _{CC} B1 |
| E10 | V _{CC} |
| E11 | GCA0/IO71NDB1 |
| E12 | IO72NDB1 |
| F1 | GFB0/IO163NPB3 |
| F2 | V _{COMPLF} |
| F3 | GFB1/IO163PPB3 |
| F4 | IO161NPB3 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO69NDB1 |
| F9 | GCB0/IO70NPB1 |
| F10 | GND |
| F11 | GCA1/IO71PDB1 |
| F12 | GCA2/IO72PDB1 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P600 Function |
| G1 | GFA1/IO162PPB3 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO162NPB3 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO86PPB1 |
| G9 | IO74NDB1 |
| G10 | GCC2/IO74PDB1 |
| G11 | IO73NDB1 |
| G12 | GCB2/IO73PDB1 |
| H1 | V _{CC} |
| H2 | GFB2/IO160PDB3 |
| H3 | GFC2/IO159PSB3 |
| H4 | GEC1/IO146PDB3 |
| H5 | V _{CC} |
| H6 | IO80PDB1 |
| H7 | IO80NDB1 |
| H8 | GDB2/IO90RSB2 |
| H9 | GDC0/IO86NPB1 |
| H10 | V _{CC} B1 |
| H11 | IO84PSB1 |
| H12 | V _{CC} |
| J1 | GEB1/IO145PDB3 |
| J2 | IO160NDB3 |
| J3 | V _{CC} B3 |
| J4 | GEC0/IO146NDB3 |
| J5 | IO129RSB2 |
| J6 | IO131RSB2 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO89RSB2 |
| J10 | TDO |
| J11 | GDA1/IO88PDB1 |
| J12 | GDB1/IO87PDB1 |

| 144-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P600 Function |
| K1 | GEB0/IO145NDB3 |
| K2 | GEA1/IO144PDB3 |
| K3 | GEA0/IO144NDB3 |
| K4 | GEA2/IO143RSB2 |
| K5 | IO119RSB2 |
| K6 | IO111RSB2 |
| K7 | GND |
| K8 | IO94RSB2 |
| K9 | GDC2/IO91RSB2 |
| K10 | GND |
| K11 | GDA0/IO88NDB1 |
| K12 | GDB0/IO87NDB1 |
| L1 | GND |
| L2 | VMV3 |
| L3 | GEB2/IO142RSB2 |
| L4 | IO136RSB2 |
| L5 | V _{CC} B2 |
| L6 | IO115RSB2 |
| L7 | IO103RSB2 |
| L8 | IO97RSB2 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV2 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO141RSB2 |
| M3 | IO138RSB2 |
| M4 | IO123RSB2 |
| M5 | IO126RSB2 |
| M6 | IO134RSB2 |
| M7 | IO108RSB2 |
| M8 | IO99RSB2 |
| M9 | TDI |
| M10 | V _{CC} B2 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

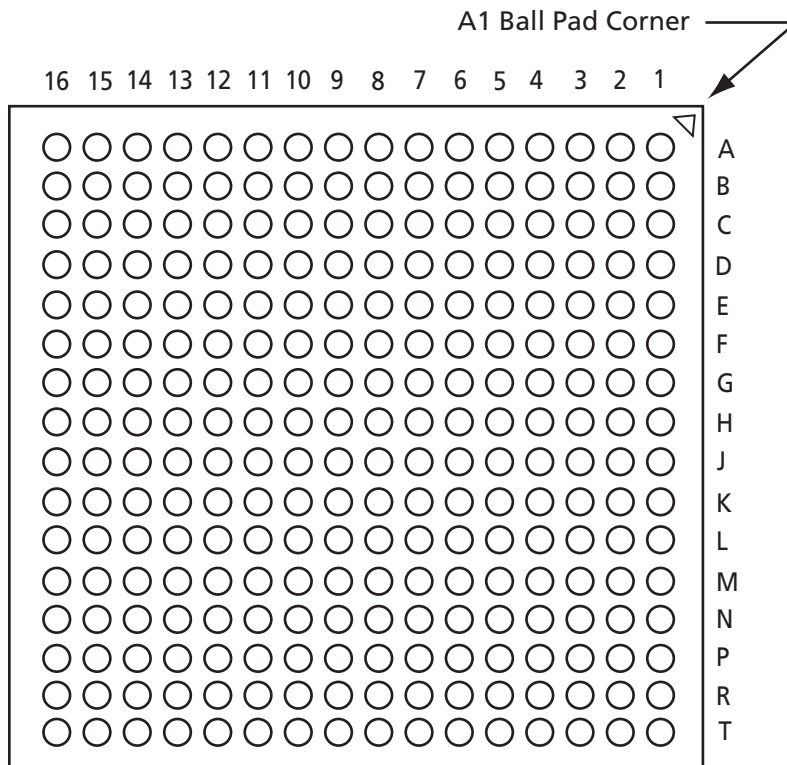
| 144-Pin FBGA | |
|--------------|------------------|
| Pin Number | A3P1000 Function |
| A1 | GNDQ |
| A2 | VMV0 |
| A3 | GAB0/IO02RSB0 |
| A4 | GAB1/IO03RSB0 |
| A5 | IO10RSB0 |
| A6 | GND |
| A7 | IO44RSB0 |
| A8 | V _{CC} |
| A9 | IO69RSB0 |
| A10 | GBA0/IO76RSB0 |
| A11 | GBA1/IO77RSB0 |
| A12 | GNDQ |
| B1 | GAB2/IO224PDB3 |
| B2 | GND |
| B3 | GAA0/IO00RSB0 |
| B4 | GAA1/IO01RSB0 |
| B5 | IO13RSB0 |
| B6 | IO26RSB0 |
| B7 | IO35RSB0 |
| B8 | IO60RSB0 |
| B9 | GBB0/IO74RSB0 |
| B10 | GBB1/IO75RSB0 |
| B11 | GND |
| B12 | VMV1 |
| C1 | IO224NDB3 |
| C2 | GFA2/IO206PPB3 |
| C3 | GAC2/IO223PDB3 |
| C4 | V _{CC} |
| C5 | IO16RSB0 |
| C6 | IO29RSB0 |
| C7 | IO32RSB0 |
| C8 | IO63RSB0 |
| C9 | IO66RSB0 |
| C10 | GBA2/IO78PDB1 |
| C11 | IO78NDB1 |
| C12 | GBC2/IO80PPB1 |

| 144-Pin FBGA | |
|--------------|------------------------|
| Pin Number | A3P1000 Function |
| D1 | IO213PDB3 |
| D2 | IO213NDB3 |
| D3 | IO223NDB3 |
| D4 | GAA2/IO225PPB3 |
| D5 | GAC0/IO04RSB0 |
| D6 | GAC1/IO05RSB0 |
| D7 | GBC0/IO72RSB0 |
| D8 | GBC1/IO73RSB0 |
| D9 | GBB2/IO79PDB1 |
| D10 | IO79NDB1 |
| D11 | IO80NPB1 |
| D12 | GCB1/IO92PPB1 |
| E1 | V _{CC} |
| E2 | GFC0/IO209NDB3 |
| E3 | GFC1/IO209PDB3 |
| E4 | VCCIB3 |
| E5 | IO225NPB3 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | GCC1/IO91PDB1 |
| E9 | V _{CC} B1 |
| E10 | V _{CC} |
| E11 | GCA0/IO93NDB1 |
| E12 | IO94NDB1 |
| F1 | GFB0/IO208NPB3 |
| F2 | V _{CC} COMPLF |
| F3 | GFB1/IO208PPB3 |
| F4 | IO206NPB3 |
| F5 | GND |
| F6 | GND |
| F7 | GND |
| F8 | GCC0/IO91NDB1 |
| F9 | GCB0/IO92NPB1 |
| F10 | GND |
| F11 | GCA1/IO93PDB1 |
| F12 | GCA2/IO94PDB1 |

| 144-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P1000 Function |
| G1 | GFA1/IO207PPB3 |
| G2 | GND |
| G3 | V _{CC} PLF |
| G4 | GFA0/IO207NPB3 |
| G5 | GND |
| G6 | GND |
| G7 | GND |
| G8 | GDC1/IO111PPB1 |
| G9 | IO96NDB1 |
| G10 | GCC2/IO96PDB1 |
| G11 | IO95NDB1 |
| G12 | GCB2/IO95PDB1 |
| H1 | V _{CC} |
| H2 | GFB2/IO205PDB3 |
| H3 | GFC2/IO204PSB3 |
| H4 | GEC1/IO190PDB3 |
| H5 | V _{CC} |
| H6 | IO105PDB1 |
| H7 | IO105NDB1 |
| H8 | GDB2/IO115RSB2 |
| H9 | GDC0/IO111NPB1 |
| H10 | V _{CC} B1 |
| H11 | IO101PSB1 |
| H12 | V _{CC} |
| J1 | GEB1/IO189PDB3 |
| J2 | IO205NDB3 |
| J3 | V _{CC} B3 |
| J4 | GEC0/IO190NDB3 |
| J5 | IO160RSB2 |
| J6 | IO157RSB2 |
| J7 | V _{CC} |
| J8 | TCK |
| J9 | GDA2/IO114RSB2 |
| J10 | TDO |
| J11 | GDA1/IO113PDB1 |
| J12 | GDB1/IO112PDB1 |

| 144-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| K1 | GEB0/IO189NDB3 |
| K2 | GEA1/IO188PDB3 |
| K3 | GEA0/IO188NDB3 |
| K4 | GEA2/IO187RSB2 |
| K5 | IO169RSB2 |
| K6 | IO152RSB2 |
| K7 | GND |
| K8 | IO117RSB2 |
| K9 | GDC2/IO116RSB2 |
| K10 | GND |
| K11 | GDA0/IO113NDB1 |
| K12 | GDB0/IO112NDB1 |
| L1 | GND |
| L2 | VMV3 |
| L3 | GEB2/IO186RSB2 |
| L4 | IO172RSB2 |
| L5 | V _{CC} B2 |
| L6 | IO153RSB2 |
| L7 | IO144RSB2 |
| L8 | IO140RSB2 |
| L9 | TMS |
| L10 | V _{JTAG} |
| L11 | VMV2 |
| L12 | TRST |
| M1 | GNDQ |
| M2 | GEC2/IO185RSB2 |
| M3 | IO173RSB2 |
| M4 | IO168RSB2 |
| M5 | IO161RSB2 |
| M6 | IO156RSB2 |
| M7 | IO145RSB2 |
| M8 | IO141RSB2 |
| M9 | TDI |
| M10 | V _{CC} B2 |
| M11 | V _{PUMP} |
| M12 | GNDQ |

256-Pin FBGA



Note: This is the bottom view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 256-Pin FBGA | | 256-Pin FBGA | | 256-Pin FBGA | |
|--------------|-----------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P250 Function | Pin Number | A3P250 Function | Pin Number | A3P250 Function |
| A1 | GND | C5 | GAC0/IO04RSB0 | E9 | IO24RSB0 |
| A2 | GAA0/IO00RSB0 | C6 | GAC1/IO05RSB0 | E10 | V _{CC} B0 |
| A3 | GAA1/IO01RSB0 | C7 | IO13RSB0 | E11 | V _{CC} B0 |
| A4 | GAB0/IO02RSB0 | C8 | IO17RSB0 | E12 | VMV1 |
| A5 | IO07RSB0 | C9 | IO22RSB0 | E13 | GBC2/IO43PDB1 |
| A6 | IO10RSB0 | C10 | IO27RSB0 | E14 | IO46RSB1 |
| A7 | IO11RSB0 | C11 | IO31RSB0 | E15 | NC |
| A8 | IO15RSB0 | C12 | GBC0/IO35RSB0 | E16 | IO45PDB1 |
| A9 | IO20RSB0 | C13 | IO34RSB0 | F1 | IO113NDB3 |
| A10 | IO25RSB0 | C14 | NC | F2 | IO112PPB3 |
| A11 | IO29RSB0 | C15 | IO42NPB1 | F3 | NC |
| A12 | IO33RSB0 | C16 | IO44PDB1 | F4 | IO115VDB3 |
| A13 | GBB1/IO38RSB0 | D1 | IO114VDB3 | F5 | V _{CC} B3 |
| A14 | GBA0/IO39RSB0 | D2 | IO114UDB3 | F6 | GND |
| A15 | GBA1/IO40RSB0 | D3 | GAC2/IO116UDB3 | F7 | V _{CC} |
| A16 | GND | D4 | NC | F8 | V _{CC} |
| B1 | GAB2/IO117UDB3 | D5 | GNDQ | F9 | V _{CC} |
| B2 | GAA2/IO118UDB3 | D6 | IO08RSB0 | F10 | V _{CC} |
| B3 | NC | D7 | IO14RSB0 | F11 | GND |
| B4 | GAB1/IO03RSB0 | D8 | IO18RSB0 | F12 | V _{CC} B1 |
| B5 | IO06RSB0 | D9 | IO23RSB0 | F13 | IO43NDB1 |
| B6 | IO09RSB0 | D10 | IO28RSB0 | F14 | NC |
| B7 | IO12RSB0 | D11 | IO32RSB0 | F15 | IO47PPB1 |
| B8 | IO16RSB0 | D12 | GNDQ | F16 | IO45NDB1 |
| B9 | IO21RSB0 | D13 | NC | G1 | IO111NDB3 |
| B10 | IO26RSB0 | D14 | GBB2/IO42PPB1 | G2 | IO111PDB3 |
| B11 | IO30RSB0 | D15 | NC | G3 | IO112NPB3 |
| B12 | GBC1/IO36RSB0 | D16 | IO44NDB1 | G4 | GFC1/IO110PPB3 |
| B13 | GBB0/IO37RSB0 | E1 | IO113PDB3 | G5 | V _{CC} B3 |
| B14 | NC | E2 | NC | G6 | V _{CC} |
| B15 | GBA2/IO41PDB1 | E3 | IO116VDB3 | G7 | GND |
| B16 | IO41NDB1 | E4 | IO115UDB3 | G8 | GND |
| C1 | IO117VDB3 | E5 | VMV0 | G9 | GND |
| C2 | IO118VDB3 | E6 | V _{CC} B0 | G10 | GND |
| C3 | NC | E7 | V _{CC} B0 | G11 | V _{CC} |
| C4 | NC | E8 | IO19RSB0 | G12 | V _{CC} B1 |

| 256-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P250 Function |
| G13 | GCC1/IO48PPB1 |
| G14 | IO47NPB1 |
| G15 | IO54PDB1 |
| G16 | IO54NDB1 |
| H1 | GFB0/IO109NPB3 |
| H2 | GFA0/IO108NDB3 |
| H3 | GFB1/IO109PPB3 |
| H4 | V _{COMPLF} |
| H5 | GFC0/IO110NPB3 |
| H6 | V _{CC} |
| H7 | GND |
| H8 | GND |
| H9 | GND |
| H10 | GND |
| H11 | V _{CC} |
| H12 | GCC0/IO48NPB1 |
| H13 | GCB1/IO49PPB1 |
| H14 | GCA0/IO50NPB1 |
| H15 | NC |
| H16 | GCB0/IO49NPB1 |
| J1 | GFA2/IO107PPB3 |
| J2 | GFA1/IO108PDB3 |
| J3 | V _{CCPLF} |
| J4 | IO106NDB3 |
| J5 | GFB2/IO106PDB3 |
| J6 | V _{CC} |
| J7 | GND |
| J8 | GND |
| J9 | GND |
| J10 | GND |
| J11 | V _{CC} |
| J12 | GCB2/IO52PPB1 |
| J13 | GCA1/IO50PPB1 |
| J14 | GCC2/IO53PPB1 |
| J15 | NC |
| J16 | GCA2/IO51PDB1 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P250 Function |
| K1 | GFC2/IO105PDB3 |
| K2 | IO107NPB3 |
| K3 | IO104PPB3 |
| K4 | NC |
| K5 | V _{CC} B3 |
| K6 | V _{CC} |
| K7 | GND |
| K8 | GND |
| K9 | GND |
| K10 | GND |
| K11 | V _{CC} |
| K12 | V _{CC} B1 |
| K13 | IO52NPB1 |
| K14 | IO55RSB1 |
| K15 | IO53NPB1 |
| K16 | IO51NDB1 |
| L1 | IO105NDB3 |
| L2 | IO104NPB3 |
| L3 | NC |
| L4 | IO102RSB3 |
| L5 | V _{CC} B3 |
| L6 | GND |
| L7 | V _{CC} |
| L8 | V _{CC} |
| L9 | V _{CC} |
| L10 | V _{CC} |
| L11 | GND |
| L12 | V _{CC} B1 |
| L13 | GDB0/IO59VPB1 |
| L14 | IO57VDB1 |
| L15 | IO57UDB1 |
| L16 | IO56PDB1 |
| M1 | IO103PDB3 |
| M2 | NC |
| M3 | IO101NPB3 |
| M4 | GEC0/IO100NPB3 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P250 Function |
| M5 | VMV3 |
| M6 | V _{CC} B2 |
| M7 | V _{CC} B2 |
| M8 | NC |
| M9 | IO74RSB2 |
| M10 | V _{CC} B2 |
| M11 | V _{CC} B2 |
| M12 | VMV2 |
| M13 | NC |
| M14 | GDB1/IO59UPB1 |
| M15 | GDC1/IO58UDB1 |
| M16 | IO56NDB1 |
| N1 | IO103NDB3 |
| N2 | IO101PPB3 |
| N3 | GEC1/IO100PPB3 |
| N4 | NC |
| N5 | GNDQ |
| N6 | GEA2/IO97RSB2 |
| N7 | IO86RSB2 |
| N8 | IO82RSB2 |
| N9 | IO75RSB2 |
| N10 | IO69RSB2 |
| N11 | IO64RSB2 |
| N12 | GNDQ |
| N13 | NC |
| N14 | V _{JTAG} |
| N15 | GDC0/IO58VDB1 |
| N16 | GDA1/IO60UDB1 |
| P1 | GEB1/IO99PDB3 |
| P2 | GEB0/IO99NDB3 |
| P3 | NC |
| P4 | NC |
| P5 | IO92RSB2 |
| P6 | IO89RSB2 |
| P7 | IO85RSB2 |
| P8 | IO81RSB2 |

| 256-Pin FBGA | |
|--------------|-------------------|
| Pin Number | A3P250 Function |
| P9 | IO76RSB2 |
| P10 | IO71RSB2 |
| P11 | IO66RSB2 |
| P12 | NC |
| P13 | TCK |
| P14 | V _{PUMP} |
| P15 | TRST |
| P16 | GDA0/IO60VDB1 |
| R1 | GEA1/IO98PDB3 |
| R2 | GEA0/IO98NDB3 |
| R3 | NC |
| R4 | GEC2/IO95RSB2 |
| R5 | IO91RSB2 |
| R6 | IO88RSB2 |
| R7 | IO84RSB2 |
| R8 | IO80RSB2 |
| R9 | IO77RSB2 |
| R10 | IO72RSB2 |
| R11 | IO68RSB2 |
| R12 | IO65RSB2 |
| R13 | GDB2/IO62RSB2 |
| R14 | TDI |
| R15 | NC |
| R16 | TDO |
| T1 | GND |
| T2 | IO94RSB2 |
| T3 | GEB2/IO96RSB2 |
| T4 | IO93RSB2 |
| T5 | IO90RSB2 |
| T6 | IO87RSB2 |
| T7 | IO83RSB2 |
| T8 | IO79RSB2 |
| T9 | IO78RSB2 |
| T10 | IO73RSB2 |
| T11 | IO70RSB2 |
| T12 | GDC2/IO63RSB2 |

| 256-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P250 Function |
| T13 | IO67RSB2 |
| T14 | GDA2/IO61RSB2 |
| T15 | TMS |
| T16 | GND |

| 256-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P400 Function |
| A1 | GND |
| A2 | GAA0/IO00RSB0 |
| A3 | GAA1/IO01RSB0 |
| A4 | GAB0/IO02RSB0 |
| A5 | IO16RSB0 |
| A6 | IO17RSB0 |
| A7 | IO22RSB0 |
| A8 | IO28RSB0 |
| A9 | IO34RSB0 |
| A10 | IO37RSB0 |
| A11 | IO41RSB0 |
| A12 | IO43RSB0 |
| A13 | GBB1/IO57RSB0 |
| A14 | GBA0/IO58RSB0 |
| A15 | GBA1/IO59RSB0 |
| A16 | GND |
| B1 | GAB2/IO154UDB3 |
| B2 | GAA2/IO155UDB3 |
| B3 | IO12RSB0 |
| B4 | GAB1/IO03RSB0 |
| B5 | IO13RSB0 |
| B6 | IO14RSB0 |
| B7 | IO21RSB0 |
| B8 | IO27RSB0 |
| B9 | IO32RSB0 |
| B10 | IO38RSB0 |
| B11 | IO42RSB0 |
| B12 | GBC1/IO55RSB0 |
| B13 | GBB0/IO56RSB0 |
| B14 | IO44RSB0 |
| B15 | GBA2/IO60PDB1 |
| B16 | IO60NDB1 |
| C1 | IO154VDB3 |
| C2 | IO155VDB3 |
| C3 | IO11RSB0 |
| C4 | IO07RSB0 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| C5 | GAC0/IO04RSB0 |
| C6 | GAC1/IO05RSB0 |
| C7 | IO20RSB0 |
| C8 | IO24RSB0 |
| C9 | IO33RSB0 |
| C10 | IO39RSB0 |
| C11 | IO45RSB0 |
| C12 | GBC0/IO54RSB0 |
| C13 | IO48RSB0 |
| C14 | VMV0 |
| C15 | IO61NPB1 |
| C16 | IO63PDB1 |
| D1 | IO151VDB3 |
| D2 | IO151UDB3 |
| D3 | GAC2/IO153UDB3 |
| D4 | IO06RSB0 |
| D5 | GNDQ |
| D6 | IO10RSB0 |
| D7 | IO19RSB0 |
| D8 | IO26RSB0 |
| D9 | IO30RSB0 |
| D10 | IO40RSB0 |
| D11 | IO46RSB0 |
| D12 | GNDQ |
| D13 | IO47RSB0 |
| D14 | GBB2/IO61PPB1 |
| D15 | IO53RSB0 |
| D16 | IO63NDB1 |
| E1 | IO150PDB3 |
| E2 | IO08RSB0 |
| E3 | IO153VDB3 |
| E4 | IO152VDB3 |
| E5 | VMV0 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | IO25RSB0 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| E9 | IO31RSB0 |
| E10 | V _{CC} B0 |
| E11 | V _{CC} B0 |
| E12 | VMV1 |
| E13 | GBC2/IO62PDB1 |
| E14 | IO65RSB1 |
| E15 | IO52RSB0 |
| E16 | IO66PDB1 |
| F1 | IO150NDB3 |
| F2 | IO149NPB3 |
| F3 | IO09RSB0 |
| F4 | IO152UDB3 |
| F5 | V _{CC} B3 |
| F6 | GND |
| F7 | V _{CC} |
| F8 | V _{CC} |
| F9 | V _{CC} |
| F10 | V _{CC} |
| F11 | GND |
| F12 | V _{CC} B1 |
| F13 | IO62NDB1 |
| F14 | IO49RSB0 |
| F15 | IO64PPB1 |
| F16 | IO66NDB1 |
| G1 | IO148NDB3 |
| G2 | IO148PDB3 |
| G3 | IO149PPB3 |
| G4 | GFC1/IO147PPB3 |
| G5 | V _{CC} B3 |
| G6 | V _{CC} |
| G7 | GND |
| G8 | GND |
| G9 | GND |
| G10 | GND |
| G11 | V _{CC} |
| G12 | V _{CC} B1 |

| 256-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P400 Function |
| G13 | GCC1/IO67PPB1 |
| G14 | IO64NPB1 |
| G15 | IO73PDB1 |
| G16 | IO73NDB1 |
| H1 | GFB0/IO146NPB3 |
| H2 | GFA0/IO145NDB3 |
| H3 | GFB1/IO146PPB3 |
| H4 | V _{COMPLF} |
| H5 | GFC0/IO147NPB3 |
| H6 | V _{CC} |
| H7 | GND |
| H8 | GND |
| H9 | GND |
| H10 | GND |
| H11 | V _{CC} |
| H12 | GCC0/IO67NPB1 |
| H13 | GCB1/IO68PPB1 |
| H14 | GCA0/IO69NPB1 |
| H15 | NC |
| H16 | GCB0/IO68NPB1 |
| J1 | GFA2/IO144PPB3 |
| J2 | GFA1/IO145PDB3 |
| J3 | V _{CCPLF} |
| J4 | IO143NDB3 |
| J5 | GFB2/IO143PDB3 |
| J6 | V _{CC} |
| J7 | GND |
| J8 | GND |
| J9 | GND |
| J10 | GND |
| J11 | V _{CC} |
| J12 | GCB2/IO71PPB1 |
| J13 | GCA1/IO69PPB1 |
| J14 | GCC2/IO72PPB1 |
| J15 | NC |
| J16 | GCA2/IO70PDB1 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| K1 | GFC2/IO142PDB3 |
| K2 | IO144NPB3 |
| K3 | IO141PPB3 |
| K4 | IO120RSB2 |
| K5 | V _{CC} B3 |
| K6 | V _{CC} |
| K7 | GND |
| K8 | GND |
| K9 | GND |
| K10 | GND |
| K11 | V _{CC} |
| K12 | V _{CC} B1 |
| K13 | IO71NPB1 |
| K14 | IO74RSB1 |
| K15 | IO72NPB1 |
| K16 | IO70NDB1 |
| L1 | IO142NDB3 |
| L2 | IO141NPB3 |
| L3 | IO125RSB2 |
| L4 | IO139RSB3 |
| L5 | V _{CC} B3 |
| L6 | GND |
| L7 | V _{CC} |
| L8 | V _{CC} |
| L9 | V _{CC} |
| L10 | V _{CC} |
| L11 | GND |
| L12 | V _{CC} B1 |
| L13 | GDB0/IO78VPB1 |
| L14 | IO76VDB1 |
| L15 | IO76UDB1 |
| L16 | IO75PDB1 |
| M1 | IO140PDB3 |
| M2 | IO130RSB2 |
| M3 | IO138NPB3 |
| M4 | GEC0/IO137NPB3 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| M5 | VMV3 |
| M6 | V _{CC} B2 |
| M7 | V _{CC} B2 |
| M8 | IO108RSB2 |
| M9 | IO101RSB2 |
| M10 | V _{CC} B2 |
| M11 | V _{CC} B2 |
| M12 | VMV2 |
| M13 | IO83RSB2 |
| M14 | GDB1/IO78UPB1 |
| M15 | GDC1/IO77UDB1 |
| M16 | IO75NDB1 |
| N1 | IO140NDB3 |
| N2 | IO138PPB3 |
| N3 | GEC1/IO137PPB3 |
| N4 | IO131RSB2 |
| N5 | GNDQ |
| N6 | GEA2/IO134RSB2 |
| N7 | IO117RSB2 |
| N8 | IO111RSB2 |
| N9 | IO99RSB2 |
| N10 | IO94RSB2 |
| N11 | IO87RSB2 |
| N12 | GNDQ |
| N13 | IO93RSB2 |
| N14 | V _{JTAG} |
| N15 | GDC0/IO77VDB1 |
| N16 | GDA1/IO79UDB1 |
| P1 | GEB1/IO136PDB3 |
| P2 | GEB0/IO136NDB3 |
| P3 | VMV2 |
| P4 | IO129RSB2 |
| P5 | IO128RSB2 |
| P6 | IO122RSB2 |
| P7 | IO115RSB2 |
| P8 | IO110RSB2 |

| 256-Pin FBGA | |
|--------------|-------------------|
| Pin Number | A3P400 Function |
| P9 | IO98RSB2 |
| P10 | IO95RSB2 |
| P11 | IO88RSB2 |
| P12 | IO84RSB2 |
| P13 | TCK |
| P14 | V _{PUMP} |
| P15 | TRST |
| P16 | GDA0/IO79VDB1 |
| R1 | GEA1/IO135PDB3 |
| R2 | GEA0/IO135NDB3 |
| R3 | IO127RSB2 |
| R4 | GEC2/IO132RSB2 |
| R5 | IO123RSB2 |
| R6 | IO118RSB2 |
| R7 | IO112RSB2 |
| R8 | IO106RSB2 |
| R9 | IO100RSB2 |
| R10 | IO96RSB2 |
| R11 | IO89RSB2 |
| R12 | IO85RSB2 |
| R13 | GDB2/IO81RSB2 |
| R14 | TDI |
| R15 | NC |
| R16 | TDO |
| T1 | GND |
| T2 | IO126RSB2 |
| T3 | GEB2/IO133RSB2 |
| T4 | IO124RSB2 |
| T5 | IO116RSB2 |
| T6 | IO113RSB2 |
| T7 | IO107RSB2 |
| T8 | IO105RSB2 |
| T9 | IO102RSB2 |
| T10 | IO97RSB2 |
| T11 | IO92RSB2 |
| T12 | GDC2/IO82RSB2 |

| 256-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P400 Function |
| T13 | IO86RSB2 |
| T14 | GDA2/IO80RSB2 |
| T15 | TMS |
| T16 | GND |

| 256-Pin FBGA | | 256-Pin FBGA | | 256-Pin FBGA | |
|--------------|-----------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| A1 | GND | C5 | GAC0/IO04RSB0 | E9 | IO31RSB0 |
| A2 | GAA0/IO00RSB0 | C6 | GAC1/IO05RSB0 | E10 | V _{CC} B0 |
| A3 | GAA1/IO01RSB0 | C7 | IO20RSB0 | E11 | V _{CC} B0 |
| A4 | GAB0/IO02RSB0 | C8 | IO24RSB0 | E12 | VMV1 |
| A5 | IO11RSB0 | C9 | IO33RSB0 | E13 | GBC2/IO62PDB1 |
| A6 | IO16RSB0 | C10 | IO39RSB0 | E14 | IO67PPB1 |
| A7 | IO18RSB0 | C11 | IO44RSB0 | E15 | IO64PPB1 |
| A8 | IO28RSB0 | C12 | GBC0/IO54RSB0 | E16 | IO66PDB1 |
| A9 | IO34RSB0 | C13 | IO51RSB0 | F1 | IO166NDB3 |
| A10 | IO37RSB0 | C14 | VMV0 | F2 | IO168NPB3 |
| A11 | IO41RSB0 | C15 | IO61NPB1 | F3 | IO167PPB3 |
| A12 | IO43RSB0 | C16 | IO63PDB1 | F4 | IO169PDB3 |
| A13 | GBB1/IO57RSB0 | D1 | IO171NDB3 | F5 | V _{CC} B3 |
| A14 | GBA0/IO58RSB0 | D2 | IO171PDB3 | F6 | GND |
| A15 | GBA1/IO59RSB0 | D3 | GAC2/IO172PDB3 | F7 | V _{CC} |
| A16 | GND | D4 | IO06RSB0 | F8 | V _{CC} |
| B1 | GAB2/IO173PDB3 | D5 | GNDQ | F9 | V _{CC} |
| B2 | GAA2/IO174PDB3 | D6 | IO10RSB0 | F10 | V _{CC} |
| B3 | GNDQ | D7 | IO19RSB0 | F11 | GND |
| B4 | GAB1/IO03RSB0 | D8 | IO26RSB0 | F12 | V _{CC} B1 |
| B5 | IO13RSB0 | D9 | IO30RSB0 | F13 | IO62NDB1 |
| B6 | IO14RSB0 | D10 | IO40RSB0 | F14 | IO64NPB1 |
| B7 | IO21RSB0 | D11 | IO45RSB0 | F15 | IO65PPB1 |
| B8 | IO27RSB0 | D12 | GNDQ | F16 | IO66NDB1 |
| B9 | IO32RSB0 | D13 | IO50RSB0 | G1 | IO165NDB3 |
| B10 | IO38RSB0 | D14 | GBB2/IO61PPB1 | G2 | IO165PDB3 |
| B11 | IO42RSB0 | D15 | IO53RSB0 | G3 | IO168PPB3 |
| B12 | GBC1/IO55RSB0 | D16 | IO63NDB1 | G4 | GFC1/IO164PPB3 |
| B13 | GBB0/IO56RSB0 | E1 | IO166PDB3 | G5 | V _{CC} B3 |
| B14 | IO52RSB0 | E2 | IO167NPB3 | G6 | V _{CC} |
| B15 | GBA2/IO60PDB1 | E3 | IO172NDB3 | G7 | GND |
| B16 | IO60NDB1 | E4 | IO169NDB3 | G8 | GND |
| C1 | IO173NDB3 | E5 | VMV0 | G9 | GND |
| C2 | IO174NDB3 | E6 | V _{CC} B0 | G10 | GND |
| C3 | VMV3 | E7 | V _{CC} B0 | G11 | V _{CC} |
| C4 | IO07RSB0 | E8 | IO25RSB0 | G12 | V _{CC} B1 |

| 256-Pin FBGA | |
|--------------|---------------------|
| Pin Number | A3P600 Function |
| G13 | GCC1/IO69PPB1 |
| G14 | IO65NPB1 |
| G15 | IO75PDB1 |
| G16 | IO75NDB1 |
| H1 | GFB0/IO163NPB3 |
| H2 | GFA0/IO162NDB3 |
| H3 | GFB1/IO163PPB3 |
| H4 | V _{COMPLF} |
| H5 | GFC0/IO164NPB3 |
| H6 | V _{CC} |
| H7 | GND |
| H8 | GND |
| H9 | GND |
| H10 | GND |
| H11 | V _{CC} |
| H12 | GCC0/IO69NPB1 |
| H13 | GCB1/IO70PPB1 |
| H14 | GCA0/IO71NPB1 |
| H15 | IO67NPB1 |
| H16 | GCB0/IO70NPB1 |
| J1 | GFA2/IO161PPB3 |
| J2 | GFA1/IO162PDB3 |
| J3 | V _{CCPLF} |
| J4 | IO160NDB3 |
| J5 | GFB2/IO160PDB3 |
| J6 | V _{CC} |
| J7 | GND |
| J8 | GND |
| J9 | GND |
| J10 | GND |
| J11 | V _{CC} |
| J12 | GCB2/IO73PPB1 |
| J13 | GCA1/IO71PPB1 |
| J14 | GCC2/IO74PPB1 |
| J15 | IO80PPB1 |
| J16 | GCA2/IO72PDB1 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P600 Function |
| K1 | GFC2/IO159PDB3 |
| K2 | IO161NPB3 |
| K3 | IO156PPB3 |
| K4 | IO129RSB2 |
| K5 | V _{CC} B3 |
| K6 | V _{CC} |
| K7 | GND |
| K8 | GND |
| K9 | GND |
| K10 | GND |
| K11 | V _{CC} |
| K12 | V _{CC} B1 |
| K13 | IO73NPB1 |
| K14 | IO80NPB1 |
| K15 | IO74NPB1 |
| K16 | IO72NDB1 |
| L1 | IO159NDB3 |
| L2 | IO156NPB3 |
| L3 | IO151PPB3 |
| L4 | IO158PSB3 |
| L5 | V _{CC} B3 |
| L6 | GND |
| L7 | V _{CC} |
| L8 | V _{CC} |
| L9 | V _{CC} |
| L10 | V _{CC} |
| L11 | GND |
| L12 | V _{CC} B1 |
| L13 | GDB0/IO87NPB1 |
| L14 | IO85NDB1 |
| L15 | IO85PDB1 |
| L16 | IO84PDB1 |
| M1 | IO150PDB3 |
| M2 | IO151NPB3 |
| M3 | IO147NPB3 |
| M4 | GEC0/IO146NPB3 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P600 Function |
| M5 | VMV3 |
| M6 | V _{CC} B2 |
| M7 | V _{CC} B2 |
| M8 | IO117RSB2 |
| M9 | IO110RSB2 |
| M10 | V _{CC} B2 |
| M11 | V _{CC} B2 |
| M12 | VMV2 |
| M13 | IO94RSB2 |
| M14 | GDB1/IO87PPB1 |
| M15 | GDC1/IO86PDB1 |
| M16 | IO84NDB1 |
| N1 | IO150NDB3 |
| N2 | IO147PPB3 |
| N3 | GEC1/IO146PPB3 |
| N4 | IO140RSB2 |
| N5 | GNDQ |
| N6 | GEA2/IO143RSB2 |
| N7 | IO126RSB2 |
| N8 | IO120RSB2 |
| N9 | IO108RSB2 |
| N10 | IO103RSB2 |
| N11 | IO99RSB2 |
| N12 | GNDQ |
| N13 | IO92RSB2 |
| N14 | V _{JTAG} |
| N15 | GDC0/IO86NDB1 |
| N16 | GDA1/IO88PDB1 |
| P1 | GEB1/IO145PDB3 |
| P2 | GEB0/IO145NDB3 |
| P3 | VMV2 |
| P4 | IO138RSB2 |
| P5 | IO136RSB2 |
| P6 | IO131RSB2 |
| P7 | IO124RSB2 |
| P8 | IO119RSB2 |



| 256-Pin FBGA | |
|--------------|-------------------|
| Pin Number | A3P600 Function |
| P9 | IO107RSB2 |
| P10 | IO104RSB2 |
| P11 | IO97RSB2 |
| P12 | VMV1 |
| P13 | TCK |
| P14 | V _{PUMP} |
| P15 | TRST |
| P16 | GDA0/IO88NDB1 |
| R1 | GEA1/IO144PDB3 |
| R2 | GEA0/IO144NDB3 |
| R3 | IO139RSB2 |
| R4 | GEC2/IO141RSB2 |
| R5 | IO132RSB2 |
| R6 | IO127RSB2 |
| R7 | IO121RSB2 |
| R8 | IO114RSB2 |
| R9 | IO109RSB2 |
| R10 | IO105RSB2 |
| R11 | IO98RSB2 |
| R12 | IO96RSB2 |
| R13 | GDB2/IO90RSB2 |
| R14 | TDI |
| R15 | GNDQ |
| R16 | TDO |
| T1 | GND |
| T2 | IO137RSB2 |
| T3 | GEB2/IO142RSB2 |
| T4 | IO134RSB2 |
| T5 | IO125RSB2 |
| T6 | IO123RSB2 |
| T7 | IO118RSB2 |
| T8 | IO115RSB2 |
| T9 | IO111RSB2 |
| T10 | IO106RSB2 |
| T11 | IO102RSB2 |
| T12 | GDC2/IO91RSB2 |

| 256-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P600 Function |
| T13 | IO93RSB2 |
| T14 | GDA2/IO89RSB2 |
| T15 | TMS |
| T16 | GND |

| 256-Pin FBGA | |
|--------------|------------------|
| Pin Number | A3P1000 Function |
| A1 | GND |
| A2 | GAA0/IO00RSB0 |
| A3 | GAA1/IO01RSB0 |
| A4 | GAB0/IO02RSB0 |
| A5 | IO16RSB0 |
| A6 | IO22RSB0 |
| A7 | IO28RSB0 |
| A8 | IO35RSB0 |
| A9 | IO45RSB0 |
| A10 | IO50RSB0 |
| A11 | IO55RSB0 |
| A12 | IO61RSB0 |
| A13 | GBB1/IO75RSB0 |
| A14 | GBA0/IO76RSB0 |
| A15 | GBA1/IO77RSB0 |
| A16 | GND |
| B1 | GAB2/IO224PDB3 |
| B2 | GAA2/IO225PDB3 |
| B3 | GNDQ |
| B4 | GAB1/IO03RSB0 |
| B5 | IO17RSB0 |
| B6 | IO21RSB0 |
| B7 | IO27RSB0 |
| B8 | IO34RSB0 |
| B9 | IO44RSB0 |
| B10 | IO51RSB0 |
| B11 | IO57RSB0 |
| B12 | GBC1/IO73RSB0 |
| B13 | GBB0/IO74RSB0 |
| B14 | IO71RSB0 |
| B15 | GBA2/IO78PDB1 |
| B16 | IO81PDB1 |
| C1 | IO224NDB3 |
| C2 | IO225NDB3 |
| C3 | VMV3 |
| C4 | IO11RSB0 |
| C5 | GAC0/IO04RSB0 |
| C6 | GAC1/IO05RSB0 |

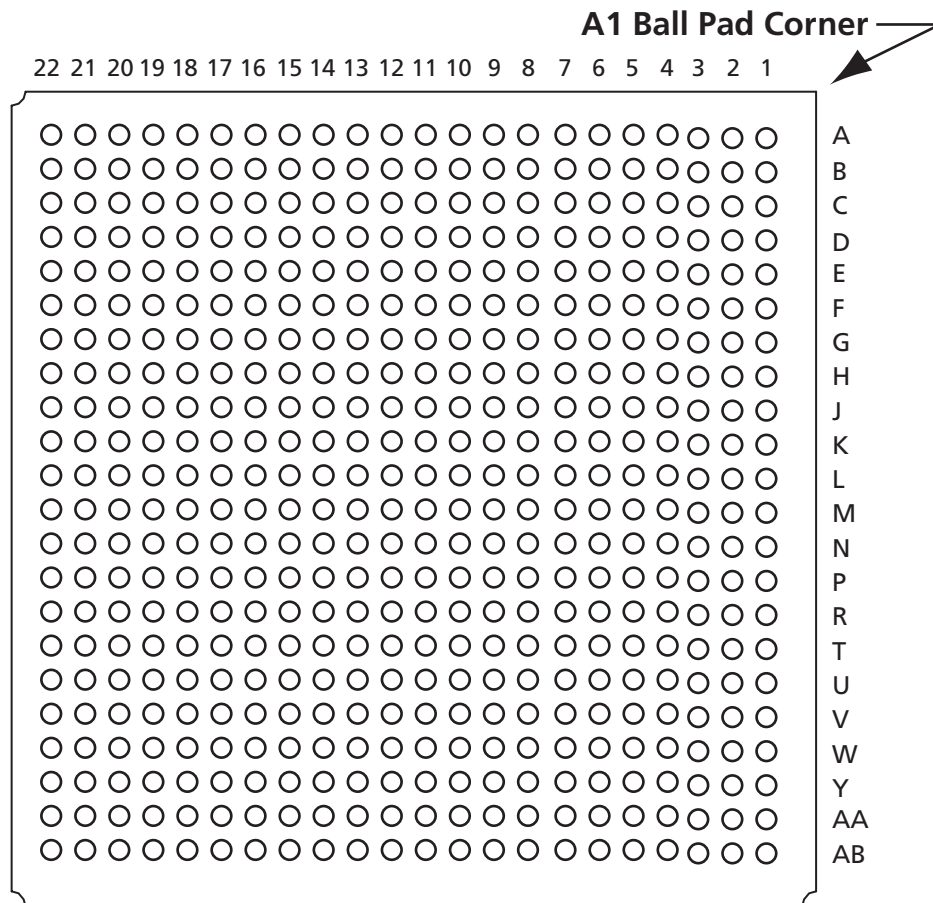
| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| C7 | IO25RSB0 |
| C8 | IO36RSB0 |
| C9 | IO42RSB0 |
| C10 | IO49RSB0 |
| C11 | IO56RSB0 |
| C12 | GBC0/IO72RSB0 |
| C13 | IO62RSB0 |
| C14 | VMV0 |
| C15 | IO78NDB1 |
| C16 | IO81NDB1 |
| D1 | IO222NDB3 |
| D2 | IO222PDB3 |
| D3 | GAC2/IO223PDB3 |
| D4 | IO223NDB3 |
| D5 | GNDQ |
| D6 | IO23RSB0 |
| D7 | IO29RSB0 |
| D8 | IO33RSB0 |
| D9 | IO46RSB0 |
| D10 | IO52RSB0 |
| D11 | IO60RSB0 |
| D12 | GNDQ |
| D13 | IO80NDB1 |
| D14 | GBB2/IO79PDB1 |
| D15 | IO79NDB1 |
| D16 | IO82NSB1 |
| E1 | IO217PDB3 |
| E2 | IO218PDB3 |
| E3 | IO221NDB3 |
| E4 | IO221PDB3 |
| E5 | VMV0 |
| E6 | V _{CC} B0 |
| E7 | V _{CC} B0 |
| E8 | IO38RSB0 |
| E9 | IO47RSB0 |
| E10 | V _{CC} B0 |
| E11 | V _{CC} B0 |
| E12 | VMV1 |

| 256-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| E13 | GBC2/IO80PDB1 |
| E14 | IO83PPB1 |
| E15 | IO86PPB1 |
| E16 | IO87PDB1 |
| F1 | IO217NDB3 |
| F2 | IO218NDB3 |
| F3 | IO216PDB3 |
| F4 | IO216NDB3 |
| F5 | V _{CC} B3 |
| F6 | GND |
| F7 | V _{CC} |
| F8 | V _{CC} |
| F9 | V _{CC} |
| F10 | V _{CC} |
| F11 | GND |
| F12 | V _{CC} B1 |
| F13 | IO83NPB1 |
| F14 | IO86NPB1 |
| F15 | IO90PPB1 |
| F16 | IO87NDB1 |
| G1 | IO210PSB3 |
| G2 | IO213NDB3 |
| G3 | IO213PDB3 |
| G4 | GFC1/IO209PPB3 |
| G5 | V _{CC} B3 |
| G6 | V _{CC} |
| G7 | GND |
| G8 | GND |
| G9 | GND |
| G10 | GND |
| G11 | V _{CC} |
| G12 | V _{CC} B1 |
| G13 | GCC1/IO91PPB1 |
| G14 | IO90NPB1 |
| G15 | IO88PDB1 |
| G16 | IO88NDB1 |
| H1 | GFB0/IO208NPB3 |
| H2 | GFA0/IO207NDB3 |

| 256-Pin FBGA | | 256-Pin FBGA | | 256-Pin FBGA | |
|--------------|---------------------|--------------|--------------------|--------------|-------------------|
| Pin Number | A3P1000 Function | Pin Number | A3P1000 Function | Pin Number | A3P1000 Function |
| H3 | GFB1/IO208PPB3 | K9 | GND | M15 | GDC1/IO111PDB1 |
| H4 | V _{COMPLF} | K10 | GND | M16 | IO107NDB1 |
| H5 | GFC0/IO209NPB3 | K11 | V _{CC} | N1 | IO194PSB3 |
| H6 | V _{CC} | K12 | V _{CC} B1 | N2 | IO192PPB3 |
| H7 | GND | K13 | IO95NPB1 | N3 | GEC1/IO190PPB3 |
| H8 | GND | K14 | IO100NPB1 | N4 | IO192NPB3 |
| H9 | GND | K15 | IO102NDB1 | N5 | GNDQ |
| H10 | GND | K16 | IO102PDB1 | N6 | GEA2/IO187RSB2 |
| H11 | V _{CC} | L1 | IO202NDB3 | N7 | IO161RSB2 |
| H12 | GCC0/IO91NPB1 | L2 | IO202PDB3 | N8 | IO155RSB2 |
| H13 | GCB1/IO92PPB1 | L3 | IO196PPB3 | N9 | IO141RSB2 |
| H14 | GCA0/IO93NPB1 | L4 | IO193PPB3 | N10 | IO129RSB2 |
| H15 | IO96NPB1 | L5 | V _{CC} B3 | N11 | IO124RSB2 |
| H16 | GCB0/IO92NPB1 | L6 | GND | N12 | GNDQ |
| J1 | GFA2/IO206PSB3 | L7 | V _{CC} | N13 | IO110PDB1 |
| J2 | GFA1/IO207PDB3 | L8 | V _{CC} | N14 | V _{JTAG} |
| J3 | V _{CC} PLF | L9 | V _{CC} | N15 | GDC0/IO111NDB1 |
| J4 | IO205NDB3 | L10 | V _{CC} | N16 | GDA1/IO113PDB1 |
| J5 | GFB2/IO205PDB3 | L11 | GND | P1 | GEB1/IO189PDB3 |
| J6 | V _{CC} | L12 | V _{CC} B1 | P2 | GEB0/IO189NDB3 |
| J7 | GND | L13 | GDB0/IO112NPB1 | P3 | VMV2 |
| J8 | GND | L14 | IO106NDB1 | P4 | IO179RSB2 |
| J9 | GND | L15 | IO106PDB1 | P5 | IO171RSB2 |
| J10 | GND | L16 | IO107PDB1 | P6 | IO165RSB2 |
| J11 | V _{CC} | M1 | IO197NSB3 | P7 | IO159RSB2 |
| J12 | GCB2/IO95PPB1 | M2 | IO196NPB3 | P8 | IO151RSB2 |
| J13 | GCA1/IO93PPB1 | M3 | IO193NPB3 | P9 | IO137RSB2 |
| J14 | GCC2/IO96PPB1 | M4 | GEC0/IO190NPB3 | P10 | IO134RSB2 |
| J15 | IO100PPB1 | M5 | VMV3 | P11 | IO128RSB2 |
| J16 | GCA2/IO94PSB1 | M6 | V _{CC} B2 | P12 | VMV1 |
| K1 | GFC2/IO204PDB3 | M7 | V _{CC} B2 | P13 | TCK |
| K2 | IO204NDB3 | M8 | IO147RSB2 | P14 | V _{PUMP} |
| K3 | IO203NDB3 | M9 | IO136RSB2 | P15 | TRST |
| K4 | IO203PDB3 | M10 | V _{CC} B2 | P16 | GDA0/IO113NDB1 |
| K5 | V _{CC} B3 | M11 | V _{CC} B2 | R1 | GEA1/IO188PDB3 |
| K6 | V _{CC} | M12 | VMV2 | R2 | GEA0/IO188NDB3 |
| K7 | GND | M13 | IO110NDB1 | R3 | IO184RSB2 |
| K8 | GND | M14 | GDB1/IO112PPB1 | R4 | GEC2/IO185RSB2 |

| 256-Pin FBGA | |
|--------------|------------------|
| Pin Number | A3P1000 Function |
| R5 | IO168RSB2 |
| R6 | IO163RSB2 |
| R7 | IO157RSB2 |
| R8 | IO149RSB2 |
| R9 | IO143RSB2 |
| R10 | IO138RSB2 |
| R11 | IO131RSB2 |
| R12 | IO125RSB2 |
| R13 | GDB2/IO115RSB2 |
| R14 | TDI |
| R15 | GNDQ |
| R16 | TDO |
| T1 | GND |
| T2 | IO183RSB2 |
| T3 | GEB2/IO186RSB2 |
| T4 | IO172RSB2 |
| T5 | IO170RSB2 |
| T6 | IO164RSB2 |
| T7 | IO158RSB2 |
| T8 | IO153RSB2 |
| T9 | IO142RSB2 |
| T10 | IO135RSB2 |
| T11 | IO130RSB2 |
| T12 | GDC2/IO116RSB2 |
| T13 | IO120RSB2 |
| T14 | GDA2/IO114RSB2 |
| T15 | TMS |
| T16 | GND |

484-Pin FBGA



Note: This is the bottom view of the package.

Note

For Package Manufacturing and Environmental information, visit the Resource Center at <http://www.actel.com/products/solutions/package/docs.aspx>.

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| A1 | GND |
| A2 | GND |
| A3 | V _{CC} B0 |
| A4 | NC |
| A5 | NC |
| A6 | IO15RSB0 |
| A7 | IO18RSB0 |
| A8 | NC |
| A9 | NC |
| A10 | IO23RSB0 |
| A11 | IO29RSB0 |
| A12 | IO35RSB0 |
| A13 | IO36RSB0 |
| A14 | NC |
| A15 | NC |
| A16 | IO50RSB0 |
| A17 | IO51RSB0 |
| A18 | NC |
| A19 | NC |
| A20 | V _{CC} B0 |
| A21 | GND |
| A22 | GND |
| B1 | GND |
| B2 | V _{CC} B3 |
| B3 | NC |
| B4 | NC |
| B5 | NC |
| B6 | NC |
| B7 | NC |
| B8 | NC |
| B9 | NC |
| B10 | NC |
| B11 | NC |
| B12 | NC |
| B13 | NC |
| B14 | NC |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| B15 | NC |
| B16 | NC |
| B17 | NC |
| B18 | NC |
| B19 | NC |
| B20 | NC |
| B21 | V _{CC} B1 |
| B22 | GND |
| C1 | V _{CC} B3 |
| C2 | NC |
| C3 | NC |
| C4 | NC |
| C5 | GND |
| C6 | NC |
| C7 | NC |
| C8 | V _{CC} |
| C9 | V _{CC} |
| C10 | NC |
| C11 | NC |
| C12 | NC |
| C13 | NC |
| C14 | V _{CC} |
| C15 | V _{CC} |
| C16 | NC |
| C17 | NC |
| C18 | GND |
| C19 | NC |
| C20 | NC |
| C21 | NC |
| C22 | V _{CC} B1 |
| D1 | NC |
| D2 | NC |
| D3 | NC |
| D4 | GND |
| D5 | GAA0/IO00RSB0 |
| D6 | GAA1/IO01RSB0 |

| 484-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P400 Function |
| D7 | GAB0/IO02RSB0 |
| D8 | IO16RSB0 |
| D9 | IO17RSB0 |
| D10 | IO22RSB0 |
| D11 | IO28RSB0 |
| D12 | IO34RSB0 |
| D13 | IO37RSB0 |
| D14 | IO41RSB0 |
| D15 | IO43RSB0 |
| D16 | GBB1/IO57RSB0 |
| D17 | GBA0/IO58RSB0 |
| D18 | GBA1/IO59RSB0 |
| D19 | GND |
| D20 | NC |
| D21 | NC |
| D22 | NC |
| E1 | NC |
| E2 | NC |
| E3 | GND |
| E4 | GAB2/IO154UDB3 |
| E5 | GAA2/IO155UDB3 |
| E6 | IO12RSB0 |
| E7 | GAB1/IO03RSB0 |
| E8 | IO13RSB0 |
| E9 | IO14RSB0 |
| E10 | IO21RSB0 |
| E11 | IO27RSB0 |
| E12 | IO32RSB0 |
| E13 | IO38RSB0 |
| E14 | IO42RSB0 |
| E15 | GBC1/IO55RSB0 |
| E16 | GBB0/IO56RSB0 |
| E17 | IO44RSB0 |
| E18 | GBA2/IO60PDB1 |
| E19 | IO60NDB1 |
| E20 | GND |



| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|-----------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P400 Function | Pin Number | A3P400 Function | Pin Number | A3P400 Function |
| E21 | NC | G13 | IO40RSB0 | J5 | IO149NPB3 |
| E22 | NC | G14 | IO46RSB0 | J6 | IO09RSB0 |
| F1 | NC | G15 | GNDQ | J7 | IO152UDB3 |
| F2 | NC | G16 | IO47RSB0 | J8 | V _{CC} B3 |
| F3 | NC | G17 | GBB2/IO61PPB1 | J9 | GND |
| F4 | IO154VDB3 | G18 | IO53RSB0 | J10 | V _{CC} |
| F5 | IO155VDB3 | G19 | IO63NDB1 | J11 | V _{CC} |
| F6 | IO11RSB0 | G20 | NC | J12 | V _{CC} |
| F7 | IO07RSB0 | G21 | NC | J13 | V _{CC} |
| F8 | GAC0/IO04RSB0 | G22 | NC | J14 | GND |
| F9 | GAC1/IO05RSB0 | H1 | NC | J15 | V _{CC} B1 |
| F10 | IO20RSB0 | H2 | NC | J16 | IO62NDB1 |
| F11 | IO24RSB0 | H3 | V _{CC} | J17 | IO49RSB0 |
| F12 | IO33RSB0 | H4 | IO150PDB3 | J18 | IO64PPB1 |
| F13 | IO39RSB0 | H5 | IO08RSB0 | J19 | IO66NDB1 |
| F14 | IO45RSB0 | H6 | IO153VDB3 | J20 | NC |
| F15 | GBC0/IO54RSB0 | H7 | IO152VDB3 | J21 | NC |
| F16 | IO48RSB0 | H8 | VMV0 | J22 | NC |
| F17 | VMV0 | H9 | V _{CC} B0 | K1 | NC |
| F18 | IO61NPB1 | H10 | V _{CC} B0 | K2 | NC |
| F19 | IO63PDB1 | H11 | IO25RSB0 | K3 | NC |
| F20 | NC | H12 | IO31RSB0 | K4 | IO148NDB3 |
| F21 | NC | H13 | V _{CC} B0 | K5 | IO148PDB3 |
| F22 | NC | H14 | V _{CC} B0 | K6 | IO149PPB3 |
| G1 | NC | H15 | VMV1 | K7 | GFC1/IO147PPB3 |
| G2 | NC | H16 | GBC2/IO62PDB1 | K8 | V _{CC} B3 |
| G3 | NC | H17 | IO65RSB1 | K9 | V _{CC} |
| G4 | IO151VDB3 | H18 | IO52RSB0 | K10 | GND |
| G5 | IO151UDB3 | H19 | IO66PDB1 | K11 | GND |
| G6 | GAC2/IO153UDB3 | H20 | V _{CC} | K12 | GND |
| G7 | IO06RSB0 | H21 | NC | K13 | GND |
| G8 | GNDQ | H22 | NC | K14 | V _{CC} |
| G9 | IO10RSB0 | J1 | NC | K15 | V _{CC} B1 |
| G10 | IO19RSB0 | J2 | NC | K16 | GCC1/IO67PPB1 |
| G11 | IO26RSB0 | J3 | NC | K17 | IO64NPB1 |
| G12 | IO30RSB0 | J4 | IO150NDB3 | K18 | IO73PDB1 |

| 484-Pin FBGA | |
|--------------|----------------------|
| Pin Number | A3P400 Function |
| K19 | IO73NDB1 |
| K20 | NC |
| K21 | NC |
| K22 | NC |
| L1 | NC |
| L2 | NC |
| L3 | NC |
| L4 | GFB0/IO146NPB3 |
| L5 | GFA0/IO145NDB3 |
| L6 | GFB1/IO146PPB3 |
| L7 | V _{CCOMPLF} |
| L8 | GFC0/IO147NPB3 |
| L9 | V _{CC} |
| L10 | GND |
| L11 | GND |
| L12 | GND |
| L13 | GND |
| L14 | V _{CC} |
| L15 | GCC0/IO67NPB1 |
| L16 | GCB1/IO68PPB1 |
| L17 | GCA0/IO69NPB1 |
| L18 | NC |
| L19 | GCB0/IO68NPB1 |
| L20 | NC |
| L21 | NC |
| L22 | NC |
| M1 | NC |
| M2 | NC |
| M3 | NC |
| M4 | GFA2/IO144PPB3 |
| M5 | GFA1/IO145PDB3 |
| M6 | V _{CCPLF} |
| M7 | IO143NDB3 |
| M8 | GFB2/IO143PDB3 |
| M9 | V _{CC} |
| M10 | GND |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| M11 | GND |
| M12 | GND |
| M13 | GND |
| M14 | V _{CC} |
| M15 | GCB2/IO71PPB1 |
| M16 | GCA1/IO69PPB1 |
| M17 | GCC2/IO72PPB1 |
| M18 | NC |
| M19 | GCA2/IO70PDB1 |
| M20 | NC |
| M21 | NC |
| M22 | NC |
| N1 | NC |
| N2 | NC |
| N3 | NC |
| N4 | GFC2/IO142PDB3 |
| N5 | IO144NPB3 |
| N6 | IO141PPB3 |
| N7 | IO120RSB2 |
| N8 | V _{CC} B3 |
| N9 | V _{CC} |
| N10 | GND |
| N11 | GND |
| N12 | GND |
| N13 | GND |
| N14 | V _{CC} |
| N15 | V _{CC} B1 |
| N16 | IO71NPB1 |
| N17 | IO74RSB1 |
| N18 | IO72NPB1 |
| N19 | IO70NDB1 |
| N20 | NC |
| N21 | NC |
| N22 | NC |
| P1 | NC |
| P2 | NC |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| P3 | NC |
| P4 | IO142NDB3 |
| P5 | IO141NPB3 |
| P6 | IO125RSB2 |
| P7 | IO139RSB3 |
| P8 | V _{CC} B3 |
| P9 | GND |
| P10 | V _{CC} |
| P11 | V _{CC} |
| P12 | V _{CC} |
| P13 | V _{CC} |
| P14 | GND |
| P15 | V _{CC} B1 |
| P16 | GDB0/IO78VPB1 |
| P17 | IO76VDB1 |
| P18 | IO76UDB1 |
| P19 | IO75PDB1 |
| P20 | NC |
| P21 | NC |
| P22 | NC |
| R1 | NC |
| R2 | NC |
| R3 | V _{CC} |
| R4 | IO140PDB3 |
| R5 | IO130RSB2 |
| R6 | IO138NPB3 |
| R7 | GEC0/IO137NPB3 |
| R8 | VMV3 |
| R9 | V _{CC} B2 |
| R10 | V _{CC} B2 |
| R11 | IO108RSB2 |
| R12 | IO101RSB2 |
| R13 | V _{CC} B2 |
| R14 | V _{CC} B2 |
| R15 | VMV2 |
| R16 | IO83RSB2 |



| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|-------------------|--------------|-------------------|--------------|--------------------|
| Pin Number | A3P400 Function | Pin Number | A3P400 Function | Pin Number | A3P400 Function |
| R17 | GDB1/IO78UPB1 | U9 | IO122RSB2 | W1 | NC |
| R18 | GDC1/IO77UDB1 | U10 | IO115RSB2 | W2 | NC |
| R19 | IO75NDB1 | U11 | IO110RSB2 | W3 | NC |
| R20 | V _{CC} | U12 | IO98RSB2 | W4 | GND |
| R21 | NC | U13 | IO95RSB2 | W5 | IO126RSB2 |
| R22 | NC | U14 | IO88RSB2 | W6 | GEB2/IO133RSB2 |
| T1 | NC | U15 | IO84RSB2 | W7 | IO124RSB2 |
| T2 | NC | U16 | TCK | W8 | IO116RSB2 |
| T3 | NC | U17 | V _{PUMP} | W9 | IO113RSB2 |
| T4 | IO140NDB3 | U18 | TRST | W10 | IO107RSB2 |
| T5 | IO138PPB3 | U19 | GDA0/IO79VDB1 | W11 | IO105RSB2 |
| T6 | GEC1/IO137PPB3 | U20 | NC | W12 | IO102RSB2 |
| T7 | IO131RSB2 | U21 | NC | W13 | IO97RSB2 |
| T8 | GNDQ | U22 | NC | W14 | IO92RSB2 |
| T9 | GEA2/IO134RSB2 | V1 | NC | W15 | GDC2/IO82RSB2 |
| T10 | IO117RSB2 | V2 | NC | W16 | IO86RSB2 |
| T11 | IO111RSB2 | V3 | GND | W17 | GDA2/IO80RSB2 |
| T12 | IO99RSB2 | V4 | GEA1/IO135PDB3 | W18 | TMS |
| T13 | IO94RSB2 | V5 | GEA0/IO135NDB3 | W19 | GND |
| T14 | IO87RSB2 | V6 | IO127RSB2 | W20 | NC |
| T15 | GNDQ | V7 | GEC2/IO132RSB2 | W21 | NC |
| T16 | IO93RSB2 | V8 | IO123RSB2 | W22 | NC |
| T17 | V _{JTAG} | V9 | IO118RSB2 | Y1 | V _{CC} B3 |
| T18 | GDC0/IO77VDB1 | V10 | IO112RSB2 | Y2 | NC |
| T19 | GDA1/IO79UDB1 | V11 | IO106RSB2 | Y3 | NC |
| T20 | NC | V12 | IO100RSB2 | Y4 | NC |
| T21 | NC | V13 | IO96RSB2 | Y5 | GND |
| T22 | NC | V14 | IO89RSB2 | Y6 | NC |
| U1 | NC | V15 | IO85RSB2 | Y7 | NC |
| U2 | NC | V16 | GDB2/IO81RSB2 | Y8 | V _{CC} |
| U3 | NC | V17 | TDI | Y9 | V _{CC} |
| U4 | GEB1/IO136PDB3 | V18 | NC | Y10 | NC |
| U5 | GEB0/IO136NDB3 | V19 | TDO | Y11 | NC |
| U6 | VMV2 | V20 | GND | Y12 | NC |
| U7 | IO129RSB2 | V21 | NC | Y13 | NC |
| U8 | IO128RSB2 | V22 | NC | Y14 | V _{CC} |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| Y15 | V _{CC} |
| Y16 | NC |
| Y17 | NC |
| Y18 | GND |
| Y19 | NC |
| Y20 | NC |
| Y21 | NC |
| Y22 | V _{CC} B1 |
| AA1 | GND |
| AA2 | V _{CC} B3 |
| AA3 | NC |
| AA4 | NC |
| AA5 | NC |
| AA6 | NC |
| AA7 | NC |
| AA8 | NC |
| AA9 | NC |
| AA10 | NC |
| AA11 | NC |
| AA12 | NC |
| AA13 | NC |
| AA14 | NC |
| AA15 | NC |
| AA16 | NC |
| AA17 | NC |
| AA18 | NC |
| AA19 | NC |
| AA20 | NC |
| AA21 | V _{CC} B1 |
| AA22 | GND |
| AB1 | GND |
| AB2 | GND |
| AB3 | V _{CC} B2 |
| AB4 | NC |
| AB5 | NC |
| AB6 | IO121RSB2 |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P400 Function |
| AB7 | IO119RSB2 |
| AB8 | IO114RSB2 |
| AB9 | IO109RSB2 |
| AB10 | NC |
| AB11 | NC |
| AB12 | IO104RSB2 |
| AB13 | IO103RSB2 |
| AB14 | NC |
| AB15 | NC |
| AB16 | IO91RSB2 |
| AB17 | IO90RSB2 |
| AB18 | NC |
| AB19 | NC |
| AB20 | V _{CC} B2 |
| AB21 | GND |
| AB22 | GND |

| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|---------------------|--------------|---------------------|--------------|-----------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| A1 | GND | B15 | NC | D7 | GAB0/IO02RSB0 |
| A2 | GND | B16 | IO47RSB0 | D8 | IO11RSB0 |
| A3 | VCCIB0 | B17 | IO49RSB0 | D9 | IO16RSB0 |
| A4 | NC | B18 | NC | D10 | IO18RSB0 |
| A5 | NC | B19 | NC | D11 | IO28RSB0 |
| A6 | IO09RSB0 | B20 | NC | D12 | IO34RSB0 |
| A7 | IO15RSB0 | B21 | V _{CCI} B1 | D13 | IO37RSB0 |
| A8 | NC | B22 | GND | D14 | IO41RSB0 |
| A9 | NC | C1 | V _{CCI} B3 | D15 | IO43RSB0 |
| A10 | IO22RSB0 | C2 | NC | D16 | GBB1/IO57RSB0 |
| A11 | IO23RSB0 | C3 | NC | D17 | GBA0/IO58RSB0 |
| A12 | IO29RSB0 | C4 | NC | D18 | GBA1/IO59RSB0 |
| A13 | IO35RSB0 | C5 | GND | D19 | GND |
| A14 | NC | C6 | NC | D20 | NC |
| A15 | NC | C7 | NC | D21 | NC |
| A16 | IO46RSB0 | C8 | V _{CC} | D22 | NC |
| A17 | IO48RSB0 | C9 | V _{CC} | E1 | NC |
| A18 | NC | C10 | NC | E2 | NC |
| A19 | NC | C11 | NC | E3 | GND |
| A20 | V _{CCI} B0 | C12 | NC | E4 | GAB2/IO173PDB3 |
| A21 | GND | C13 | NC | E5 | GAA2/IO174PDB3 |
| A22 | GND | C14 | V _{CC} | E6 | GNDQ |
| B1 | GND | C15 | V _{CC} | E7 | GAB1/IO03RSB0 |
| B2 | V _{CCI} B3 | C16 | NC | E8 | IO13RSB0 |
| B3 | NC | C17 | NC | E9 | IO14RSB0 |
| B4 | NC | C18 | GND | E10 | IO21RSB0 |
| B5 | NC | C19 | NC | E11 | IO27RSB0 |
| B6 | IO08RSB0 | C20 | NC | E12 | IO32RSB0 |
| B7 | IO12RSB0 | C21 | NC | E13 | IO38RSB0 |
| B8 | NC | C22 | V _{CCI} B1 | E14 | IO42RSB0 |
| B9 | NC | D1 | NC | E15 | GBC1/IO55RSB0 |
| B10 | IO17RSB0 | D2 | NC | E16 | GBB0/IO56RSB0 |
| B11 | NC | D3 | NC | E17 | IO52RSB0 |
| B12 | NC | D4 | GND | E18 | GBA2/IO60PDB1 |
| B13 | IO36RSB0 | D5 | GAA0/IO00RSB0 | E19 | IO60NDB1 |
| B14 | NC | D6 | GAA1/IO01RSB0 | E20 | GND |

| 484-Pin FBGA | |
|--------------|-----------------|
| Pin Number | A3P600 Function |
| E21 | NC |
| E22 | NC |
| F1 | NC |
| F2 | NC |
| F3 | NC |
| F4 | IO173NDB3 |
| F5 | IO174NDB3 |
| F6 | VMV3 |
| F7 | IO07RSB0 |
| F8 | GAC0/IO04RSB0 |
| F9 | GAC1/IO05RSB0 |
| F10 | IO20RSB0 |
| F11 | IO24RSB0 |
| F12 | IO33RSB0 |
| F13 | IO39RSB0 |
| F14 | IO44RSB0 |
| F15 | GBC0/IO54RSB0 |
| F16 | IO51RSB0 |
| F17 | VMV0 |
| F18 | IO61NPB1 |
| F19 | IO63PDB1 |
| F20 | NC |
| F21 | NC |
| F22 | NC |
| G1 | IO170NDB3 |
| G2 | IO170PDB3 |
| G3 | NC |
| G4 | IO171NDB3 |
| G5 | IO171PDB3 |
| G6 | GAC2/IO172PDB3 |
| G7 | IO06RSB0 |
| G8 | GNDQ |
| G9 | IO10RSB0 |
| G10 | IO19RSB0 |
| G11 | IO26RSB0 |
| G12 | IO30RSB0 |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P600 Function |
| G13 | IO40RSB0 |
| G14 | IO45RSB0 |
| G15 | GNDQ |
| G16 | IO50RSB0 |
| G17 | GBB2/IO61PPB1 |
| G18 | IO53RSB0 |
| G19 | IO63NDB1 |
| G20 | NC |
| G21 | NC |
| G22 | NC |
| H1 | NC |
| H2 | NC |
| H3 | V _{CC} |
| H4 | IO166PDB3 |
| H5 | IO167NPB3 |
| H6 | IO172NDB3 |
| H7 | IO169NDB3 |
| H8 | VMV0 |
| H9 | V _{CC} B0 |
| H10 | V _{CC} B0 |
| H11 | IO25RSB0 |
| H12 | IO31RSB0 |
| H13 | V _{CC} B0 |
| H14 | V _{CC} B0 |
| H15 | VMV1 |
| H16 | GBC2/IO62PDB1 |
| H17 | IO67PPB1 |
| H18 | IO64PPB1 |
| H19 | IO66PDB1 |
| H20 | V _{CC} |
| H21 | NC |
| H22 | NC |
| J1 | NC |
| J2 | NC |
| J3 | NC |
| J4 | IO166NDB3 |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P600 Function |
| J5 | IO168NPB3 |
| J6 | IO167PPB3 |
| J7 | IO169PDB3 |
| J8 | V _{CC} B3 |
| J9 | GND |
| J10 | V _{CC} |
| J11 | V _{CC} |
| J12 | V _{CC} |
| J13 | V _{CC} |
| J14 | GND |
| J15 | V _{CC} B1 |
| J16 | IO62NDB1 |
| J17 | IO64NPB1 |
| J18 | IO65PPB1 |
| J19 | IO66NDB1 |
| J20 | NC |
| J21 | IO68PDB1 |
| J22 | IO68NDB1 |
| K1 | IO157PDB3 |
| K2 | IO157NDB3 |
| K3 | NC |
| K4 | IO165NDB3 |
| K5 | IO165PDB3 |
| K6 | IO168PPB3 |
| K7 | GFC1/IO164PPB3 |
| K8 | V _{CC} B3 |
| K9 | V _{CC} |
| K10 | GND |
| K11 | GND |
| K12 | GND |
| K13 | GND |
| K14 | V _{CC} |
| K15 | V _{CC} B1 |
| K16 | GCC1/IO69PPB1 |
| K17 | IO65NPB1 |
| K18 | IO75PDB1 |

| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|---------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| K19 | IO75NDB1 | M11 | GND | P3 | IO153NDB3 |
| K20 | NC | M12 | GND | P4 | IO159NDB3 |
| K21 | IO76NDB1 | M13 | GND | P5 | IO156NPB3 |
| K22 | IO76PDB1 | M14 | V _{CC} | P6 | IO151PPB3 |
| L1 | NC | M15 | GCB2/IO73PPB1 | P7 | IO158PPB3 |
| L2 | IO155PDB3 | M16 | GCA1/IO71PPB1 | P8 | V _{CC} B3 |
| L3 | NC | M17 | GCC2/IO74PPB1 | P9 | GND |
| L4 | GFB0/IO163NPB3 | M18 | IO80PPB1 | P10 | V _{CC} |
| L5 | GFA0/IO162NDB3 | M19 | GCA2/IO72PDB1 | P11 | V _{CC} |
| L6 | GFB1/IO163PPB3 | M20 | IO79PPB1 | P12 | V _{CC} |
| L7 | V _{COMPLF} | M21 | IO78PPB1 | P13 | V _{CC} |
| L8 | GFC0/IO164NPB3 | M22 | NC | P14 | GND |
| L9 | V _{CC} | N1 | IO154NDB3 | P15 | V _{CC} B1 |
| L10 | GND | N2 | IO154PDB3 | P16 | GDB0/IO87NPB1 |
| L11 | GND | N3 | NC | P17 | IO85NDB1 |
| L12 | GND | N4 | GFC2/IO159PDB3 | P18 | IO85PDB1 |
| L13 | GND | N5 | IO161NPB3 | P19 | IO84PDB1 |
| L14 | V _{CC} | N6 | IO156PPB3 | P20 | NC |
| L15 | GCC0/IO69NPB1 | N7 | IO129RSB2 | P21 | IO81PDB1 |
| L16 | GCB1/IO70PPB1 | N8 | V _{CC} B3 | P22 | NC |
| L17 | GCA0/IO71NPB1 | N9 | V _{CC} | R1 | NC |
| L18 | IO67NPB1 | N10 | GND | R2 | NC |
| L19 | GCB0/IO70NPB1 | N11 | GND | R3 | V _{CC} |
| L20 | IO77PDB1 | N12 | GND | R4 | IO150PDB3 |
| L21 | IO77NDB1 | N13 | GND | R5 | IO151NPB3 |
| L22 | IO78NPB1 | N14 | V _{CC} | R6 | IO147NPB3 |
| M1 | NC | N15 | V _{CC} B1 | R7 | GEC0/IO146NPB3 |
| M2 | IO155NDB3 | N16 | IO73NPB1 | R8 | VMV3 |
| M3 | IO158NPB3 | N17 | IO80NPB1 | R9 | V _{CC} B2 |
| M4 | GFA2/IO161PPB3 | N18 | IO74NPB1 | R10 | V _{CC} B2 |
| M5 | GFA1/IO162PDB3 | N19 | IO72NDB1 | R11 | IO117RSB2 |
| M6 | V _{CC} PLF | N20 | NC | R12 | IO110RSB2 |
| M7 | IO160NDB3 | N21 | IO79NPB1 | R13 | V _{CC} B2 |
| M8 | GFB2/IO160PDB3 | N22 | NC | R14 | V _{CC} B2 |
| M9 | V _{CC} | P1 | NC | R15 | VMV2 |
| M10 | GND | P2 | IO153PDB3 | R16 | IO94RSB2 |

| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|-------------------|--------------|-------------------|--------------|--------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| R17 | GDB1/IO87PPB1 | U9 | IO131RSB2 | W1 | NC |
| R18 | GDC1/IO86PDB1 | U10 | IO124RSB2 | W2 | IO148PDB3 |
| R19 | IO84NDB1 | U11 | IO119RSB2 | W3 | NC |
| R20 | V _{CC} | U12 | IO107RSB2 | W4 | GND |
| R21 | IO81NDB1 | U13 | IO104RSB2 | W5 | IO137RSB2 |
| R22 | IO82PDB1 | U14 | IO97RSB2 | W6 | GEB2/IO142RSB2 |
| T1 | IO152PDB3 | U15 | VMV1 | W7 | IO134RSB2 |
| T2 | IO152NDB3 | U16 | TCK | W8 | IO125RSB2 |
| T3 | NC | U17 | V _{PUMP} | W9 | IO123RSB2 |
| T4 | IO150NDB3 | U18 | TRST | W10 | IO118RSB2 |
| T5 | IO147PPB3 | U19 | GDA0/IO88NDB1 | W11 | IO115RSB2 |
| T6 | GEC1/IO146PPB3 | U20 | NC | W12 | IO111RSB2 |
| T7 | IO140RSB2 | U21 | IO83NDB1 | W13 | IO106RSB2 |
| T8 | GNDQ | U22 | NC | W14 | IO102RSB2 |
| T9 | GEA2/IO143RSB2 | V1 | NC | W15 | GDC2/IO91RSB2 |
| T10 | IO126RSB2 | V2 | NC | W16 | IO93RSB2 |
| T11 | IO120RSB2 | V3 | GND | W17 | GDA2/IO89RSB2 |
| T12 | IO108RSB2 | V4 | GEA1/IO144PDB3 | W18 | TMS |
| T13 | IO103RSB2 | V5 | GEA0/IO144NDB3 | W19 | GND |
| T14 | IO99RSB2 | V6 | IO139RSB2 | W20 | NC |
| T15 | GNDQ | V7 | GEC2/IO141RSB2 | W21 | NC |
| T16 | IO92RSB2 | V8 | IO132RSB2 | W22 | NC |
| T17 | V _{JTAG} | V9 | IO127RSB2 | Y1 | V _{CC} B3 |
| T18 | GDC0/IO86NDB1 | V10 | IO121RSB2 | Y2 | IO148NDB3 |
| T19 | GDA1/IO88PDB1 | V11 | IO114RSB2 | Y3 | NC |
| T20 | NC | V12 | IO109RSB2 | Y4 | NC |
| T21 | IO83PDB1 | V13 | IO105RSB2 | Y5 | GND |
| T22 | IO82NDB1 | V14 | IO98RSB2 | Y6 | NC |
| U1 | IO149PDB3 | V15 | IO96RSB2 | Y7 | NC |
| U2 | IO149NDB3 | V16 | GDB2/IO90RSB2 | Y8 | V _{CC} |
| U3 | NC | V17 | TDI | Y9 | V _{CC} |
| U4 | GEB1/IO145PDB3 | V18 | GNDQ | Y10 | NC |
| U5 | GEB0/IO145NDB3 | V19 | TDO | Y11 | NC |
| U6 | VMV2 | V20 | GND | Y12 | NC |
| U7 | IO138RSB2 | V21 | NC | Y13 | NC |
| U8 | IO136RSB2 | V22 | NC | Y14 | V _{CC} |

| 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P600 Function | Pin Number | A3P600 Function |
| Y15 | V _{CC} | AB7 | IO128RSB2 |
| Y16 | NC | AB8 | IO122RSB2 |
| Y17 | NC | AB9 | IO116RSB2 |
| Y18 | GND | AB10 | NC |
| Y19 | NC | AB11 | NC |
| Y20 | NC | AB12 | IO113RSB2 |
| Y21 | NC | AB13 | IO112RSB2 |
| Y22 | V _{CC} B1 | AB14 | NC |
| AA1 | GND | AB15 | NC |
| AA2 | V _{CC} B3 | AB16 | IO100RSB2 |
| AA3 | NC | AB17 | IO95RSB2 |
| AA4 | NC | AB18 | NC |
| AA5 | NC | AB19 | NC |
| AA6 | IO135RSB2 | AB20 | V _{CC} B2 |
| AA7 | IO133RSB2 | AB21 | GND |
| AA8 | NC | AB22 | GND |
| AA9 | NC | | |
| AA10 | NC | | |
| AA11 | NC | | |
| AA12 | NC | | |
| AA13 | NC | | |
| AA14 | NC | | |
| AA15 | NC | | |
| AA16 | IO101RSB2 | | |
| AA17 | NC | | |
| AA18 | NC | | |
| AA19 | NC | | |
| AA20 | NC | | |
| AA21 | V _{CC} B1 | | |
| AA22 | GND | | |
| AB1 | GND | | |
| AB2 | GND | | |
| AB3 | V _{CC} B2 | | |
| AB4 | NC | | |
| AB5 | NC | | |
| AB6 | IO130RSB2 | | |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| A1 | GND |
| A2 | GND |
| A3 | V _{CC} B0 |
| A4 | IO07RSB0 |
| A5 | IO09RSB0 |
| A6 | IO13RSB0 |
| A7 | IO18RSB0 |
| A8 | IO20RSB0 |
| A9 | IO26RSB0 |
| A10 | IO32RSB0 |
| A11 | IO40RSB0 |
| A12 | IO41RSB0 |
| A13 | IO53RSB0 |
| A14 | IO59RSB0 |
| A15 | IO64RSB0 |
| A16 | IO65RSB0 |
| A17 | IO67RSB0 |
| A18 | IO69RSB0 |
| A19 | NC |
| A20 | V _{CC} B0 |
| A21 | GND |
| A22 | GND |
| B1 | GND |
| B2 | V _{CC} B3 |
| B3 | NC |
| B4 | IO06RSB0 |
| B5 | IO08RSB0 |
| B6 | IO12RSB0 |
| B7 | IO15RSB0 |
| B8 | IO19RSB0 |
| B9 | IO24RSB0 |
| B10 | IO31RSB0 |
| B11 | IO39RSB0 |
| B12 | IO48RSB0 |
| B13 | IO54RSB0 |
| B14 | IO58RSB0 |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| B15 | IO63RSB0 |
| B16 | IO66RSB0 |
| B17 | IO68RSB0 |
| B18 | IO70RSB0 |
| B19 | NC |
| B20 | NC |
| B21 | V _{CC} B1 |
| B22 | GND |
| C1 | V _{CC} B3 |
| C2 | IO220PDB3 |
| C3 | NC |
| C4 | NC |
| C5 | GND |
| C6 | IO10RSB0 |
| C7 | IO14RSB0 |
| C8 | V _{CC} |
| C9 | V _{CC} |
| C10 | IO30RSB0 |
| C11 | IO37RSB0 |
| C12 | IO43RSB0 |
| C13 | NC |
| C14 | V _{CC} |
| C15 | V _{CC} |
| C16 | NC |
| C17 | NC |
| C18 | GND |
| C19 | NC |
| C20 | NC |
| C21 | NC |
| C22 | V _{CC} B1 |
| D1 | IO219PDB3 |
| D2 | IO220NDB3 |
| D3 | NC |
| D4 | GND |
| D5 | GAA0/IO00RSB0 |
| D6 | GAA1/IO01RSB0 |

| 484-Pin FBGA | |
|--------------|------------------|
| Pin Number | A3P1000 Function |
| D7 | GAB0/IO02RSB0 |
| D8 | IO16RSB0 |
| D9 | IO22RSB0 |
| D10 | IO28RSB0 |
| D11 | IO35RSB0 |
| D12 | IO45RSB0 |
| D13 | IO50RSB0 |
| D14 | IO55RSB0 |
| D15 | IO61RSB0 |
| D16 | GBB1/IO75RSB0 |
| D17 | GBA0/IO76RSB0 |
| D18 | GBA1/IO77RSB0 |
| D19 | GND |
| D20 | NC |
| D21 | NC |
| D22 | NC |
| E1 | IO219NDB3 |
| E2 | NC |
| E3 | GND |
| E4 | GAB2/IO224PDB3 |
| E5 | GAA2/IO225PDB3 |
| E6 | GNDQ |
| E7 | GAB1/IO03RSB0 |
| E8 | IO17RSB0 |
| E9 | IO21RSB0 |
| E10 | IO27RSB0 |
| E11 | IO34RSB0 |
| E12 | IO44RSB0 |
| E13 | IO51RSB0 |
| E14 | IO57RSB0 |
| E15 | GBC1/IO73RSB0 |
| E16 | GBB0/IO74RSB0 |
| E17 | IO71RSB0 |
| E18 | GBA2/IO78PDB1 |
| E19 | IO81PDB1 |
| E20 | GND |

| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|------------------|--------------|--------------------|--------------|--------------------|
| Pin Number | A3P1000 Function | Pin Number | A3P1000 Function | Pin Number | A3P1000 Function |
| E21 | NC | G13 | IO52RSB0 | J5 | IO218NDB3 |
| E22 | IO84PDB1 | G14 | IO60RSB0 | J6 | IO216PDB3 |
| F1 | NC | G15 | GNDQ | J7 | IO216NDB3 |
| F2 | IO215PDB3 | G16 | IO80NDB1 | J8 | V _{CC} B3 |
| F3 | IO215NDB3 | G17 | GBB2/IO79PDB1 | J9 | GND |
| F4 | IO224NDB3 | G18 | IO79NDB1 | J10 | V _{CC} |
| F5 | IO225NDB3 | G19 | IO82NPB1 | J11 | V _{CC} |
| F6 | VMV3 | G20 | IO85PDB1 | J12 | V _{CC} |
| F7 | IO11RSB0 | G21 | IO85NDB1 | J13 | V _{CC} |
| F8 | GAC0/IO04RSB0 | G22 | NC | J14 | GND |
| F9 | GAC1/IO05RSB0 | H1 | NC | J15 | V _{CC} B1 |
| F10 | IO25RSB0 | H2 | NC | J16 | IO83NPB1 |
| F11 | IO36RSB0 | H3 | V _{CC} | J17 | IO86NPB1 |
| F12 | IO42RSB0 | H4 | IO217PDB3 | J18 | IO90PPB1 |
| F13 | IO49RSB0 | H5 | IO218PDB3 | J19 | IO87NDB1 |
| F14 | IO56RSB0 | H6 | IO221NDB3 | J20 | NC |
| F15 | GBC0/IO72RSB0 | H7 | IO221PDB3 | J21 | IO89PDB1 |
| F16 | IO62RSB0 | H8 | VMV0 | J22 | IO89NDB1 |
| F17 | VMV0 | H9 | V _{CC} B0 | K1 | IO211PDB3 |
| F18 | IO78NDB1 | H10 | V _{CC} B0 | K2 | IO211NDB3 |
| F19 | IO81NDB1 | H11 | IO38RSB0 | K3 | NC |
| F20 | IO82PPB1 | H12 | IO47RSB0 | K4 | IO210PPB3 |
| F21 | NC | H13 | V _{CC} B0 | K5 | IO213NDB3 |
| F22 | IO84NDB1 | H14 | V _{CC} B0 | K6 | IO213PDB3 |
| G1 | IO214NDB3 | H15 | VMV1 | K7 | GFC1/IO209PPB3 |
| G2 | IO214PDB3 | H16 | GBC2/IO80PDB1 | K8 | V _{CC} B3 |
| G3 | NC | H17 | IO83PPB1 | K9 | V _{CC} |
| G4 | IO222NDB3 | H18 | IO86PPB1 | K10 | GND |
| G5 | IO222PDB3 | H19 | IO87PDB1 | K11 | GND |
| G6 | GAC2/IO223PDB3 | H20 | V _{CC} | K12 | GND |
| G7 | IO223NDB3 | H21 | NC | K13 | GND |
| G8 | GNDQ | H22 | NC | K14 | V _{CC} |
| G9 | IO23RSB0 | J1 | IO212NDB3 | K15 | V _{CC} B1 |
| G10 | IO29RSB0 | J2 | IO212PDB3 | K16 | GCC1/IO91PPB1 |
| G11 | IO33RSB0 | J3 | NC | K17 | IO90NPB1 |
| G12 | IO46RSB0 | J4 | IO217NDB3 | K18 | IO88PDB1 |

| 484-Pin FBGA | |
|--------------|----------------------|
| Pin Number | A3P1000 Function |
| K19 | IO88NDB1 |
| K20 | IO94NPB1 |
| K21 | IO98NDB1 |
| K22 | IO98PDB1 |
| L1 | NC |
| L2 | IO200PDB3 |
| L3 | IO210NPB3 |
| L4 | GFB0/IO208NPB3 |
| L5 | GFA0/IO207NDB3 |
| L6 | GFB1/IO208PPB3 |
| L7 | V _{CCOMPLF} |
| L8 | GFC0/IO209NPB3 |
| L9 | V _{CC} |
| L10 | GND |
| L11 | GND |
| L12 | GND |
| L13 | GND |
| L14 | V _{CC} |
| L15 | GCC0/IO91NPB1 |
| L16 | GCB1/IO92PPB1 |
| L17 | GCA0/IO93NPB1 |
| L18 | IO96NPB1 |
| L19 | GCB0/IO92NPB1 |
| L20 | IO97PDB1 |
| L21 | IO97NDB1 |
| L22 | IO99NPB1 |
| M1 | NC |
| M2 | IO200NDB3 |
| M3 | IO206NDB3 |
| M4 | GFA2/IO206PDB3 |
| M5 | GFA1/IO207PDB3 |
| M6 | V _{CCPLF} |
| M7 | IO205NDB3 |
| M8 | GFB2/IO205PDB3 |
| M9 | V _{CC} |
| M10 | GND |

| 484-Pin FBGA | |
|--------------|-------------------|
| Pin Number | A3P1000 Function |
| M11 | GND |
| M12 | GND |
| M13 | GND |
| M14 | V _{CC} |
| M15 | GCB2/IO95PPB1 |
| M16 | GCA1/IO93PPB1 |
| M17 | GCC2/IO96PPB1 |
| M18 | IO100PPB1 |
| M19 | GCA2/IO94PPB1 |
| M20 | IO101PPB1 |
| M21 | IO99PPB1 |
| M22 | NC |
| N1 | IO201NDB3 |
| N2 | IO201PDB3 |
| N3 | NC |
| N4 | GFC2/IO204PDB3 |
| N5 | IO204NDB3 |
| N6 | IO203NDB3 |
| N7 | IO203PDB3 |
| N8 | V _{CCB3} |
| N9 | V _{CC} |
| N10 | GND |
| N11 | GND |
| N12 | GND |
| N13 | GND |
| N14 | V _{CC} |
| N15 | V _{CCB1} |
| N16 | IO95NPB1 |
| N17 | IO100NPB1 |
| N18 | IO102NDB1 |
| N19 | IO102PDB1 |
| N20 | NC |
| N21 | IO101NPB1 |
| N22 | IO103PDB1 |
| P1 | NC |
| P2 | IO199PDB3 |

| 484-Pin FBGA | |
|--------------|-------------------|
| Pin Number | A3P1000 Function |
| P3 | IO199NDB3 |
| P4 | IO202NDB3 |
| P5 | IO202PDB3 |
| P6 | IO196PPB3 |
| P7 | IO193PPB3 |
| P8 | V _{CCB3} |
| P9 | GND |
| P10 | V _{CC} |
| P11 | V _{CC} |
| P12 | V _{CC} |
| P13 | V _{CC} |
| P14 | GND |
| P15 | V _{CCB1} |
| P16 | GDB0/IO112NPB1 |
| P17 | IO106NDB1 |
| P18 | IO106PDB1 |
| P19 | IO107PDB1 |
| P20 | NC |
| P21 | IO104PDB1 |
| P22 | IO103NDB1 |
| R1 | NC |
| R2 | IO197PPB3 |
| R3 | V _{CC} |
| R4 | IO197NPB3 |
| R5 | IO196NPB3 |
| R6 | IO193NPB3 |
| R7 | GEC0/IO190NPB3 |
| R8 | VMV3 |
| R9 | V _{CCB2} |
| R10 | V _{CCB2} |
| R11 | IO147RSB2 |
| R12 | IO136RSB2 |
| R13 | V _{CCB2} |
| R14 | V _{CCB2} |
| R15 | VMV2 |
| R16 | IO110NDB1 |

| 484-Pin FBGA | | 484-Pin FBGA | | 484-Pin FBGA | |
|--------------|-------------------|--------------|-------------------|--------------|--------------------|
| Pin Number | A3P1000 Function | Pin Number | A3P1000 Function | Pin Number | A3P1000 Function |
| R17 | GDB1/IO112PPB1 | U9 | IO165RSB2 | W1 | NC |
| R18 | GDC1/IO111PDB1 | U10 | IO159RSB2 | W2 | IO191PDB3 |
| R19 | IO107NDB1 | U11 | IO151RSB2 | W3 | NC |
| R20 | V _{CC} | U12 | IO137RSB2 | W4 | GND |
| R21 | IO104NDB1 | U13 | IO134RSB2 | W5 | IO183RSB2 |
| R22 | IO105PDB1 | U14 | IO128RSB2 | W6 | GEB2/IO186RSB2 |
| T1 | IO198PDB3 | U15 | VMV1 | W7 | IO172RSB2 |
| T2 | IO198NDB3 | U16 | TCK | W8 | IO170RSB2 |
| T3 | NC | U17 | V _{PUMP} | W9 | IO164RSB2 |
| T4 | IO194PPB3 | U18 | TRST | W10 | IO158RSB2 |
| T5 | IO192PPB3 | U19 | GDA0/IO113NDB1 | W11 | IO153RSB2 |
| T6 | GEC1/IO190PPB3 | U20 | NC | W12 | IO142RSB2 |
| T7 | IO192NPB3 | U21 | IO108NDB1 | W13 | IO135RSB2 |
| T8 | GNDQ | U22 | IO109PDB1 | W14 | IO130RSB2 |
| T9 | GEA2/IO187RSB2 | V1 | NC | W15 | GDC2/IO116RSB2 |
| T10 | IO161RSB2 | V2 | NC | W16 | IO120RSB2 |
| T11 | IO155RSB2 | V3 | GND | W17 | GDA2/IO114RSB2 |
| T12 | IO141RSB2 | V4 | GEA1/IO188PDB3 | W18 | TMS |
| T13 | IO129RSB2 | V5 | GEA0/IO188NDB3 | W19 | GND |
| T14 | IO124RSB2 | V6 | IO184RSB2 | W20 | NC |
| T15 | GNDQ | V7 | GEC2/IO185RSB2 | W21 | NC |
| T16 | IO110PDB1 | V8 | IO168RSB2 | W22 | NC |
| T17 | V _{JTAG} | V9 | IO163RSB2 | Y1 | V _{CC} B3 |
| T18 | GDC0/IO111NDB1 | V10 | IO157RSB2 | Y2 | IO191NDB3 |
| T19 | GDA1/IO113PDB1 | V11 | IO149RSB2 | Y3 | NC |
| T20 | NC | V12 | IO143RSB2 | Y4 | IO182RSB2 |
| T21 | IO108PDB1 | V13 | IO138RSB2 | Y5 | GND |
| T22 | IO105NDB1 | V14 | IO131RSB2 | Y6 | IO177RSB2 |
| U1 | IO195PDB3 | V15 | IO125RSB2 | Y7 | IO174RSB2 |
| U2 | IO195NDB3 | V16 | GDB2/IO115RSB2 | Y8 | V _{CC} |
| U3 | IO194NPB3 | V17 | TDI | Y9 | V _{CC} |
| U4 | GEB1/IO189PDB3 | V18 | GNDQ | Y10 | IO154RSB2 |
| U5 | GEB0/IO189NDB3 | V19 | TDO | Y11 | IO148RSB2 |
| U6 | VMV2 | V20 | GND | Y12 | IO140RSB2 |
| U7 | IO179RSB2 | V21 | NC | Y13 | NC |
| U8 | IO171RSB2 | V22 | IO109NDB1 | Y14 | V _{CC} |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| Y15 | V _{CC} |
| Y16 | NC |
| Y17 | NC |
| Y18 | GND |
| Y19 | NC |
| Y20 | NC |
| Y21 | NC |
| Y22 | V _{CC} B1 |
| AA1 | GND |
| AA2 | V _{CC} B3 |
| AA3 | NC |
| AA4 | IO181RSB2 |
| AA5 | IO178RSB2 |
| AA6 | IO175RSB2 |
| AA7 | IO169RSB2 |
| AA8 | IO166RSB2 |
| AA9 | IO160RSB2 |
| AA10 | IO152RSB2 |
| AA11 | IO146RSB2 |
| AA12 | IO139RSB2 |
| AA13 | IO133RSB2 |
| AA14 | NC |
| AA15 | NC |
| AA16 | IO122RSB2 |
| AA17 | IO119RSB2 |
| AA18 | IO117RSB2 |
| AA19 | NC |
| AA20 | NC |
| AA21 | V _{CC} B1 |
| AA22 | GND |
| AB1 | GND |
| AB2 | GND |
| AB3 | V _{CC} B2 |
| AB4 | IO180RSB2 |
| AB5 | IO176RSB2 |
| AB6 | IO173RSB2 |

| 484-Pin FBGA | |
|--------------|--------------------|
| Pin Number | A3P1000 Function |
| AB7 | IO167RSB2 |
| AB8 | IO162RSB2 |
| AB9 | IO156RSB2 |
| AB10 | IO150RSB2 |
| AB11 | IO145RSB2 |
| AB12 | IO144RSB2 |
| AB13 | IO132RSB2 |
| AB14 | IO127RSB2 |
| AB15 | IO126RSB2 |
| AB16 | IO123RSB2 |
| AB17 | IO121RSB2 |
| AB18 | IO118RSB2 |
| AB19 | NC |
| AB20 | V _{CC} B2 |
| AB21 | GND |
| AB22 | GND |

Part Number and Revision Date

Part Number 51700097-003-2

Revised February 2008

List of Changes

The following table lists critical changes that were made in the current version of the document.

| Previous Version | Changes in Current Version (v1.2) | Page |
|---|--|-------------|
| v1.1 (January 2008) | The "68-Pin QFN" section is new. | 3-1 |
| v1.0 (January 2008) | In the "100-Pin VQFP" A3P030 pin table, the function of pin 63 was incorrect and changed from IO39RSB0 to GDB0/IO38RSB0. | 3-13 |
| v2.2 (July 2007) | This document was previously in datasheet v2.2. As a result of moving to the handbook format, Actel has restarted the version numbers. The new version number is v1.0. | N/A |
| v2.0 (April 2007) | The following pin tables were updated for A3P600: "208-Pin PQFP", "256-Pin FBGA", and "484-Pin FBGA". The "144-Pin FBGA" table for A3P600 is new. | 4-27 – 4-63 |
| Advanced v0.7 (January 2007) | Notes were added to the package diagrams identifying if they were top or bottom view. | N/A |
| | The A3P030 "132-Pin QFN" table is new. | 4-2 |
| | The A3P060 "132-Pin QFN" table is new. | 4-4 |
| | The A3P125 "132-Pin QFN" table is new. | 4-6 |
| | The A3P250 "132-Pin QFN" table is new. | 4-8 |
| Advanced v0.5 (January 2006) | The A3P030 "100-Pin VQFP" table is new. | 4-11 |
| | The A3P060 "100-Pin VQFP" pin table was updated. | 4-13 |
| | The A3P125 "100-Pin VQFP" pin table was updated. | 4-13 |
| | The A3P060 "144-Pin TQFP" pin table was updated. | 4-16 |
| | The A3P125 "144-Pin TQFP" pin table was updated. | 4-18 |
| | The A3P125 "208-Pin PQFP" pin table was updated. | 4-21 |
| | The A3P400 "208-Pin PQFP" pin table was updated. | 4-25 |
| | The A3P060 "144-Pin FBGA" pin table was updated. | 4-32 |
| | The A3P125 "144-Pin FBGA" pin table is new. | 4-34 |
| | The A3P400 "144-Pin FBGA" is new. | 4-38 |
| | The A3P400 "256-Pin FBGA" was updated. | 4-48 |
| | The A3P1000 "256-Pin FBGA" was updated. | 4-54 |
| | The A3P400 "484-Pin FBGA" was updated. | 4-58 |
| The A3P1000 "484-Pin FBGA" was updated. | 4-68 | |

| Previous Version | Changes in Current Version (v1.2) | Page |
|------------------------------|--|------|
| Advanced v0.2 (continued) | The A3P250 "100-Pin VQFP*" pin table was updated. | 4-14 |
| | The A3P250 "208-Pin PQFP*" pin table was updated. | 4-23 |
| | The A3P1000 "208-Pin PQFP*" pin table was updated. | 4-29 |
| | The A3P250 "144-Pin FBGA*" pin table was updated. | 4-36 |
| | The A3P1000 "144-Pin FBGA*" pin table was updated. | 4-32 |
| | The A3P250 "256-Pin FBGA*" pin table was updated. | 4-45 |
| | The A3P1000 "256-Pin FBGA*" pin table was updated. | 4-54 |
| | The A3P1000 "484-Pin FBGA*" pin table was updated. | 4-68 |

Datasheet Categories

Categories

In order to provide the latest information to designers, some datasheets are published before data has been fully characterized. Datasheets are designated as “Product Brief,” “Advanced,” and “Production”. The definition of these categories are as follows:

Product Brief

The product brief is a summarized version of a datasheet (advanced or production) and contains general product information. This document gives an overview of specific device and family information.

Advanced

This version contains initial estimated information based on simulation, other products, devices, or speed grades. This information can be used as estimates, but not for production. This label only applies to the DC and Switching Characteristics chapter of the datasheet and will only be used when the data has not been fully characterized.

Unmarked (production)

This version contains information that is considered to be final.

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