

April 2012

FSA642 Low-Power, Three-Port, High-Speed MIPI Switch

Features

Low On Capacitance: 7.0pF Typical
 Low On Resistance: 7.0Ω Typical
 Wide -3db Bandwidth: 1GHz Typical
 24-Lead UMLP (2.5 x 3.4mm) Package

8kV ESD Rating; >16kV Power/GND ESD Rating

Applications

- Dual Camera Applications for Cell Phones
- Dual LCD Applications for Cell Phones, Digital Camera Displays, and Viewfinders

IMPORTANT NOTE:

For additional performance information, please contact analogswitch@fairchildsemi.com.

Description

The FSA642 is a bi-directional, low-power, high-speed analog switch. The pin out is designed to ease differential signal layout and is configured as a triple-pole, double-throw switch (TPDT). The FSA642 is optimized for switching between two MIPI devices, such as cameras or LCD displays and on-board Multimedia Application Processors (MAP).

The FSA642 is compatible with the requirements of Mobile Industry Processor Interface (MIPI). The low-capacitance design allows the FSA642 to switch signals that exceed 500MHz in frequency. Superior channel-to-channel crosstalk immunity minimizes interference and allows the transmission of high-speed differential signals and single-ended signals, as described by the MIPI specification.

Ordering Information

Part Number	Top Mark	Operating Temperature Range	Package
FSA642UMX	JG	-40 to +85°C	24-Lead, Quad, Ultrathin Molded Leadless Package (UMLP), 2.5 x 3.4mm

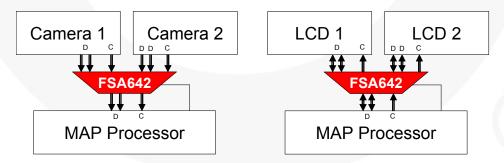
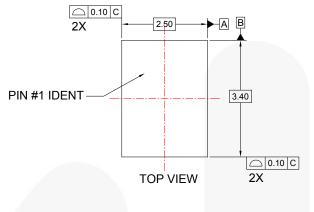
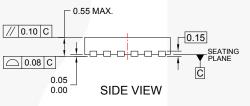
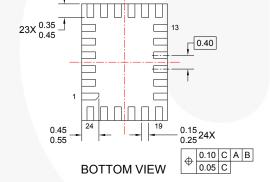


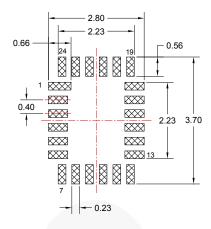
Figure 1. Application Block Diagram

Physical Dimensions









RECOMMENDED LAND PATTERN

NOTES:

- A. NO JEDEC STANDARD APPLIES
- B. DIMENSIONS ARE IN MILLIMETERS.
- C. DIMENSIONS AND TOLERANCES PER ASME Y14.5M, 1994
- D. DRAWING FILENAME: MKT-UMLP24Arev1.

Figure 16. 24-Lead UMLP Package

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Definition of Terms				
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