

Micro Single Board Computer Based on the Qualcomm® Snapdragon™ 410 Processor for Industrial Applications

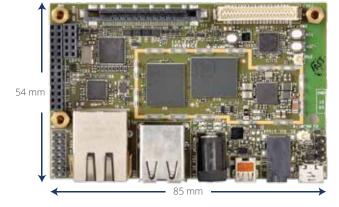
A small form-factor and cost effective solution for industrial applications that require high performance, comprehensive set of I/Os, and support for extended temperature ranges

The Inforce 6309 Micro SBC is a tiny and full-fledged Single-Board-Computer (SBC) based on the powerful 64-bit Snapdragon 410 processor. The credit card sized (54mm x 85mm) Micro SBC is a product-ready platform, suitable for several industrial embedded designs. It provides an uncompromised direct access to a rich set of I/Os despite its miniature size. Unique features include dual-MIPI-CSI and GbE. Optional SKUs support extended operating temperature range (-30°C to 85°C) and LVDS displays. An optional interface card enables Power-over-Ethernet (PoE) and RS485 ports for industrial applications. The Inforce 6309 Micro SBC delivers high performance, rich multimedia, low power consumption, connectivity and comprehensive support for an upstream Linux kernel (Linaro), Android OS and device drivers for embedded applications such as:

- Industrial automation and Internet-of-Everything (IoE) devices
- Medical devices that consolidate several discrete functions
- Robotics, UAVs, and AR/VR based hands-free computing

Processing, Power and Performance

- Qualcomm® Snapdragon™ 410 processor (APQ8016 SoC)
 - Quad-core ARM® Cortex® A53 64-bit CPU @1.2GHz each, ARMv8-A ISA compliant
 - Adreno™ 306 GPU with support for OpenGL ES 3.0, DirectX, and OpenCL
 - Hexagon™ QDSP6 @700MHz for ultra-low power audio and computer vision processing
 - Integrated ISP with support for 1.5GPs throughput
- 1GB LPDDR3 RAM @533MHz + 8GB eMMC (eMCP package)
- MicroSD card connector
- 802.11 b/g/n 2.4GHz WiFi, BT 4.1 LE, GPS
- 10/100/1000Mbps Ethernet on an USB2.0 to GbE controller
- Supports dual-cameras (13MP total) on MIPI-CSI
- µHDMI output for HD1080p @30fps video and HD audio



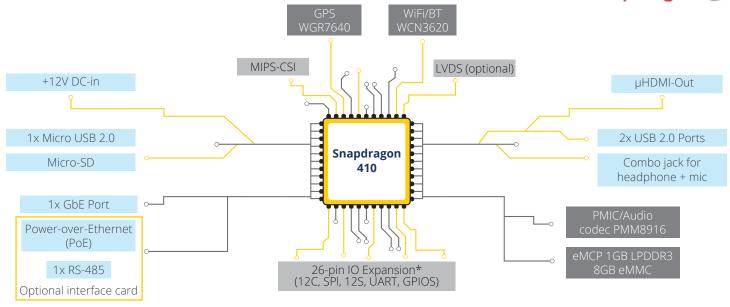
Micro SBC

*The above image shows an optional SKU with an LVDS interface



Broad Application Space





^{*} Not all interfaces can be used at the same time

Additional Technical Specifications

Video, Audio and I/O Interfaces

- μHDMI Rev1.3a for 1080p30 HD
- Dual MIPI-CSI2 (4/2-lanes)
- Combo-jack for headphone/Mic-in
- Support for 720p Miracast™
- H.264 playback and capture @1080p
- H.265 playback @1080p
- 26-pin I/O expansion header
- External antenna connectors
- Power-over-Ethernet (PoE), configured as PD (optional)
- LVDS for displays (optional)

- 2× USB 2.0
- 1× USB 2.0 OTG
- ITAG
- 1× I2C
- 1× SPI
- 1x I2S
- 2× UART
- 20× GPIO
- RS-485 (optional)

Software Support

 Choice of Android Lollipop/Linaro Ubuntu Linux board support packages (BSP)/OS pre-loaded

Power, Mechanical and Environmental

- Power: +12V DC Input Socket (1.5A typ.);
- Dimensions: 54mm x 85mm (Micro SBC)
- Operating Temp: 0°C to +70°C
- Storage Temp: -20°C to +80°C
- Relative Humidity: 5 to 95% non-condensing
- RoHS and WEEE compliant

Ordering Info

Part Number	Description	Available
IFC6309-0*-P1	Micro SBC (Android/	Q4 2015
	Commercial temp.)	
IFC6309-1*-P1	Micro SBC (Linux/	Q4 2015
	Commercial temp.)	
IFC6309X-0*-P1	Micro SBC (Adroid/	Q4 2015
	Extended temp.)	
IFC6309X-1*-P1	Micro SBC (Linux/	Q4 2015
	Extended temp.)	

Inforce - Embedded, Connected, Aware,

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Global Sales & Support, Inforce Computing Inc., 48820 Kato Road Ste 600B, Fremont, CA 94538 USA. Phone: (510) 683-9999 | Email: sales@inforcecomputing.com