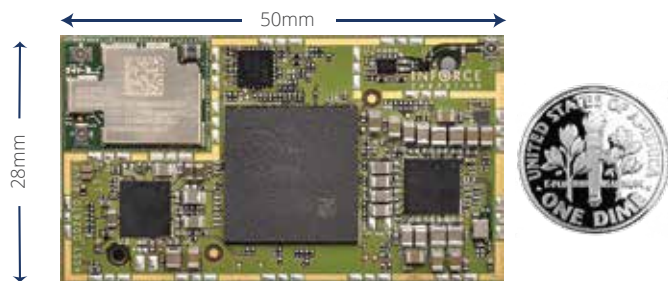




Inforce 6601[™] Micro SoM

Qualcomm[®] Snapdragon[™] 820 Processor-based Tiny System-on-Module

4K UHD HEVC Video and HDMI 2.0 Capable SoM for SWaP Constrained Embedded Applications



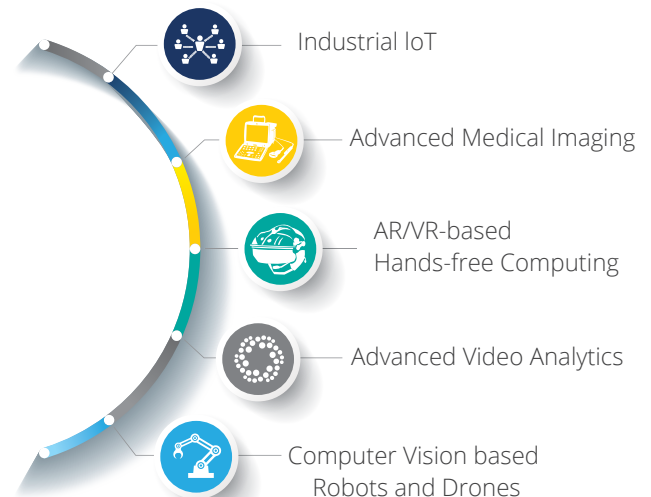
The Inforce 6601 Micro SOM, powered by the next-gen ARM@v8 64-bit quad-core Qualcomm Snapdragon 820 applications processor (APQ8096), is suitable for several advanced embedded applications. The Inforce 6601 Micro SOM provides pin, electrical, connector, and form-factor compatibility across a wide product line of Micro SOMs that share a common carrier board design. The Inforce 6601 Micro SOM also comes with an optional EMI shielding for better RF noise protection, while also doubling up as a medium for heat spreading and dissipation to improve performance.

Storage, Multimedia, and Connectivity

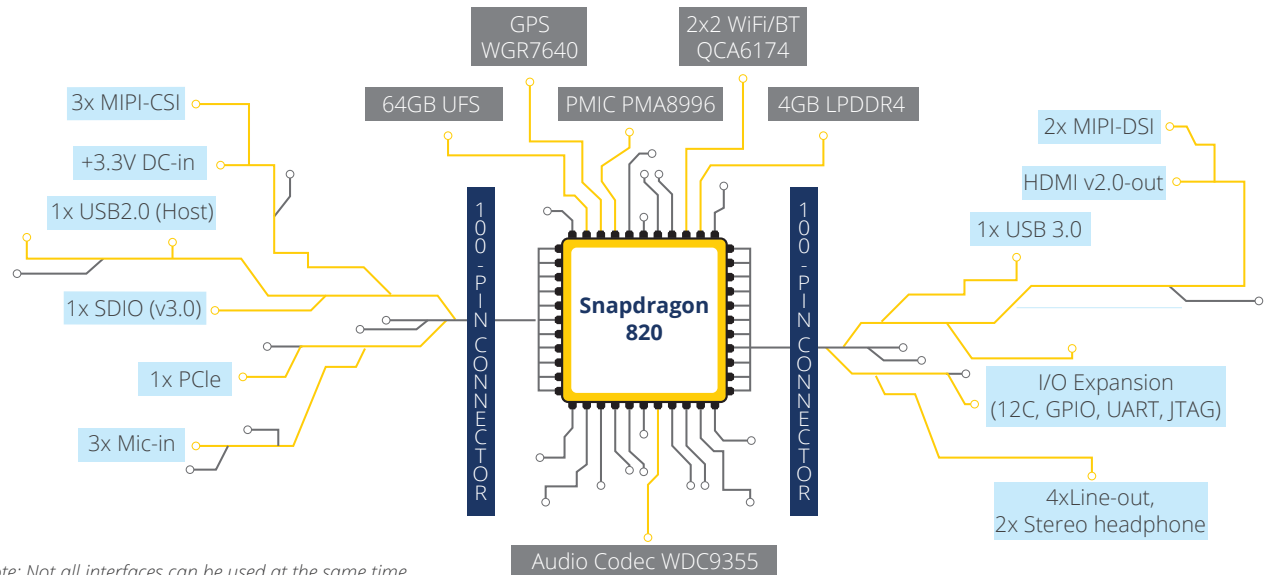
- 4GB LPDDR4@ 1866MHz
- 64GB UFS 2.0 gear 3 (1 lane)
- eMMC 5.1 (optional)
- 1x μ SD card SD3.0 interface with support up to HS400
- H.264 playback and capture @4K60
- H.265 playback @4K60 and capture @4K30
- Hi-Fi Audio with codec support for MP3, AAC + eAAC, WMA 9/Pro, Dolby AC-3, eAC-3, DTS
- Dual 4-lane DSI DPHY 1.2 and HDMI 2.0 interfaces for touch screen displays
- Supports the capture of up to 28 megapixels with zero shutter lag on MIPI-CSI
- BT4.1 LE and dual band WLAN 2x2 MU-MIMO

Compute Power and Performance

- Qualcomm Snapdragon 820 processor (APQ8096 SoC)
 - Quad-core ARM@v8 64-bit CPUs organized as two dual clusters viz., Gold@2.2GHz and Silver@1.6GHz each
 - Adreno[™] 530 GPU with 64 bit addressing and support for OpenGL ES 3.2, OpenCL 2.0, and Vulkan
 - Hexagon[™] 680 DSP with dual-Hexagon vector processor (HVX-512) @825MHz for ultra low-power audio and computer vision processing
 - Dual 14-bit Spectra[™] ISP with support for up to 1.2GPix/sec throughput with zero shutter lag
- Onboard LPDDR4 RAM, UFS Flash Memory, WiFi/BT, audio codec, power management and GPS
- Complete 4K60 encode/decode system - 4k60 H.265/VP9 decode with uncompressed 4K display



Broad Application Space



Note: Not all interfaces can be used at the same time

Flexible and Configurable I/O Interfaces

- HDMI v2.0
- Dual MIPI-DSI (4-lane) & Touch Screen
- Trio MIPI-CSI (3x4 lane)
- 1x USB 3.0 (Host/OTG)
- 1 x PCIe, 1 x SDC
- 12x BLSPs for UART/I2C/SPI
- 8 x GPIOs, Slim Bus
- 4x lineout, 2x HPH, 3xMic-in
- 1x USB 2.0 (Host)

Network Interfaces

- 802.11ac 2X2 MU-MIMO 2.4GHz/5GHz WiFi & BT 4.1LE
- GPS/GNSS
- GigE (on carrier)

Power, Mechanical, and Environmental

- Power: +3.3V/6A Input
- 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
- Dimensions: 28mm x 50mm
- Weight: 11grams / 0.40z

Software Support

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

Inforce - Embedded. Connected. Aware.

Inforce Computing® is a supplier of application-ready embedded hardware platforms in eco-aware, low-profile footprints, available off-the-shelf to serve growing markets enabled by the next generation of connected devices. At Inforce, we are inspired by the inflection point in mobile and wireless technologies which is spawning innovative devices, content, and services. Together with our silicon, software, and system partners, Inforce is pioneering products with an optimized delivery model for medical imaging, smart office, hands-free computing, robotics, and drones.

Carrier Board For Inforce 6601 Micro SOM



A mini-ITX carrier board (170 X170mm) expands the I/O and connectivity of the Inforce 6601 micro SOM. A full-fledged development platform (Inforce 6601 Development Kit) inclusive of both is available.

Ordering Info

Part Number	Description	Available
IFC6601-00-P1	Micro SOM (Android)	Q2 2016
IFC6601-10-P1	Micro SOM (Linux)	Q2 2016
SYS6601-00-P1	Mini-ITX Dev. Kit (Android)	Q2 2016
SYS6601-10-P1	Mini-ITX Dev. Kit (Linux)	Q2 2016

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