

PSMC-M640F



To save valuable customers' development time to market, not only the RISC-based boards, but also the following ECO system which Portwell can provide should be taken into consideration: full functions of CPU Module + Carrier board (SMARC form factor, "Smart Mobility ARChitecture"), ready BSP for Android 4.0 & Linux 3.0.x, QT5 & GTK+ Middleware and advanced Utility (Remote Management, Diagnostic Tool) supported.



PSMC-M640F is design as CPU module series with SMARC form factor. It is based on embedded Freescale™ i.MX6 processor, an ARM® Cortex®-A9 processor, Single, Dual and Quad-Core.



The SMARC ("Smart Mobility ARChitecture"), small form factor of lower power, cost concern, and high performance, is used as building blocks for portable and stationary embedded systems. The SMARC pin-out is optimized for the features common to ARM CPUs and not common to the x86 PC world. The modular approach allows scalability, fast time to market and upgradability while still maintaining cost performance, low power and small physical size.

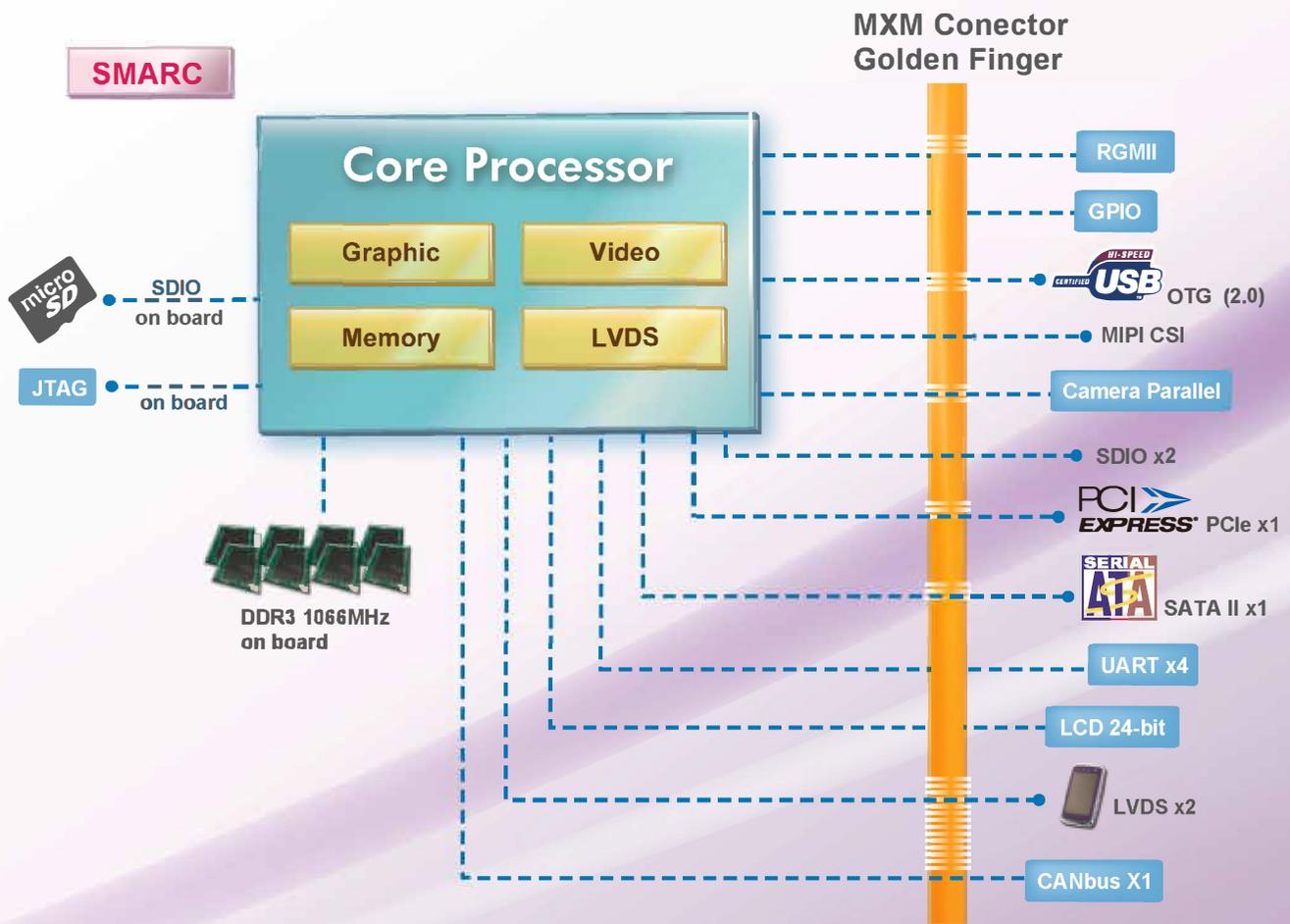
FEATURES

- Freescale™ i.MX6 Cortex A9 application processor, Single / Dual / Quad core SKU
- Ultra low power consumption: 2W (Single core) ~ 6W (Quad core)
- Longevity support more than 10 years
- Built-in H/W Graphics accelerators, Open GL ES2.0, Open VG1.1 supported
- 4 independent displays supported. Multi-format of encode & decode.
- Parallel LCD display interfaces
- Serial and parallel camera input provisions
- Multiple I2C, I2S and serial port options
- USB client / host mode (OTG) operation
- SD and eMMC card operation

ORDERING GUIDE

Contact us	PSMC-M640F, CPU Module board (Quad core)
Contact us	PSMC-C300ARM, I/O carrier board
By project	PSMC-M620F, CPU Module Board (Dual core)
By project	PSMC-M610F, CPU Module Board (Single core)





Processor Core

- ◆ Freescale™ i.MX6 Family, ARM™ Cortex-A9, Single/Dual/Quad core processor

Highlights

- ◆ More than 10 years longevity support
- ◆ Ultra low power 2W~6W
- ◆ Rich connectivity for expansion such as 1x CAN bus, interfaces of 1x MIPI-DSI, 2x MIPI-CSI for camera, 1x SPDIF, and PWM.

Memory

- ◆ Onboard DDR3 1GB support up to 2GB

Platform Thermal Design Power			
CPU	i.MX6 solo 2W	i.MX6 Dual 4W	i.MX6 Quad 6W