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 NXP 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

- NXP i.MX6 Cortex® A9 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

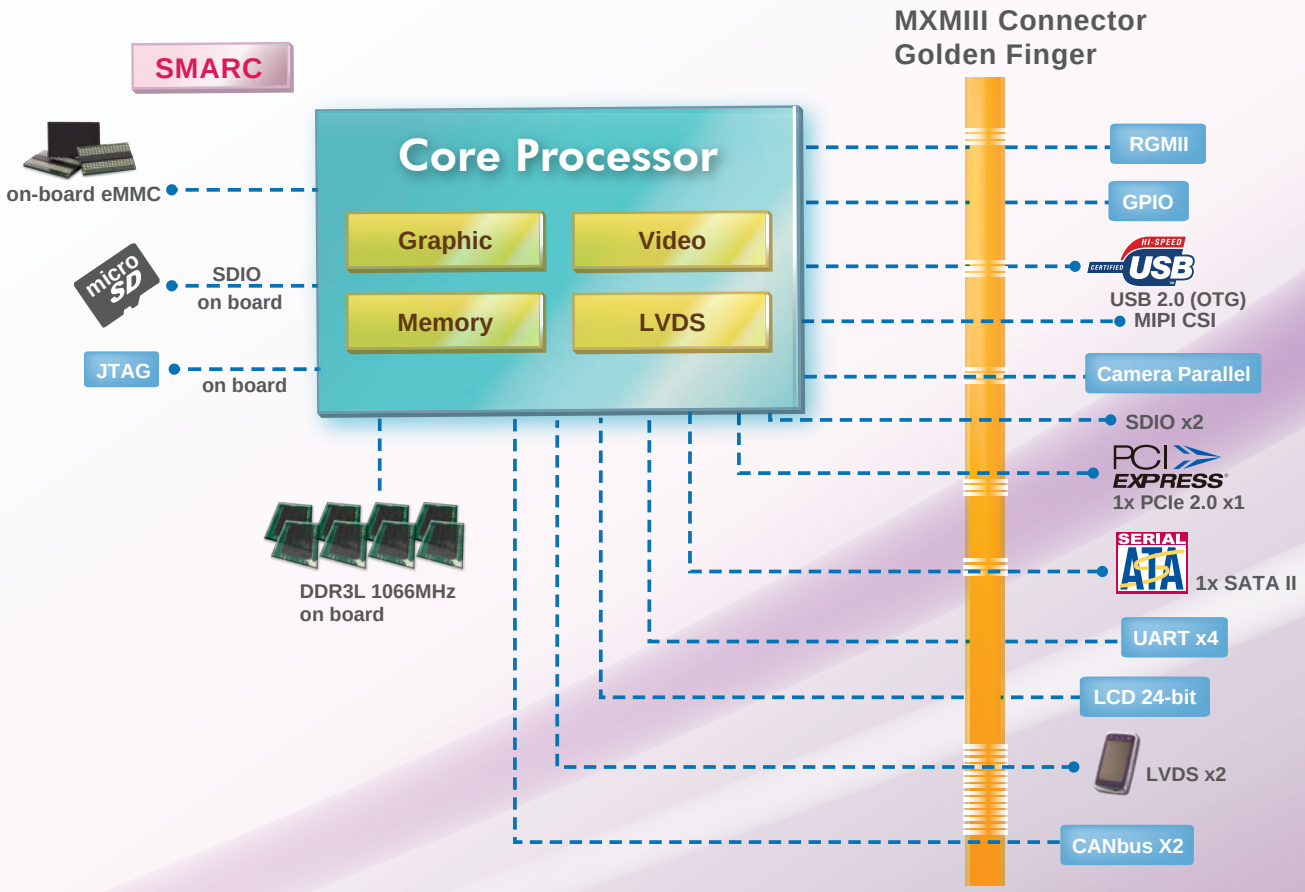
ORDERING GUIDE

AB7-3062Z	PSMC-M640F, CPU Module board (Quad core)
AB7-3064Z	PSMC-M620F, CPU Module Board (Dual core)
AB7-3063Z	PSMC-M610F, CPU Module Board (Single core)
Contact us	PSMC-C300ARM, I/O carrier board

SATA 2.0 · USB 2.0 · Giga LAN · Watch DOG · H/W Monitor · GPIO

FC CE · Microsoft® Windows® Embedded Partner · RoHS

intel IoT Solutions Alliance



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 2 CANbus bus, interfaces of 1x MIPI-DSI, 2x MIPI-CSI for camara, 1x SPDIF, and PWM

Memory

- Onboard DDR3L 1GB support up to 2GB

Platform Thermal Design Power

CPU	i.MX6 solo	i.MX6 Dual	i.MX6 Quad
	2W	4W	6W