# MA5D4 System on Module

Being Atmel's SAMA5D4 MPU is ideal for any high-performance, secure, and cost-sensitive industrial application. High-speed computing needs are supported by ARM Neon and 128kB L2 cache which increases the overall system performance. The SAMA5D4 is an ideal fit for low-cost user inter face applications that require video playback.

The high-grade security features allows you to protect any system against counterfeiting and software theft, and allows you to securely store and transfer.
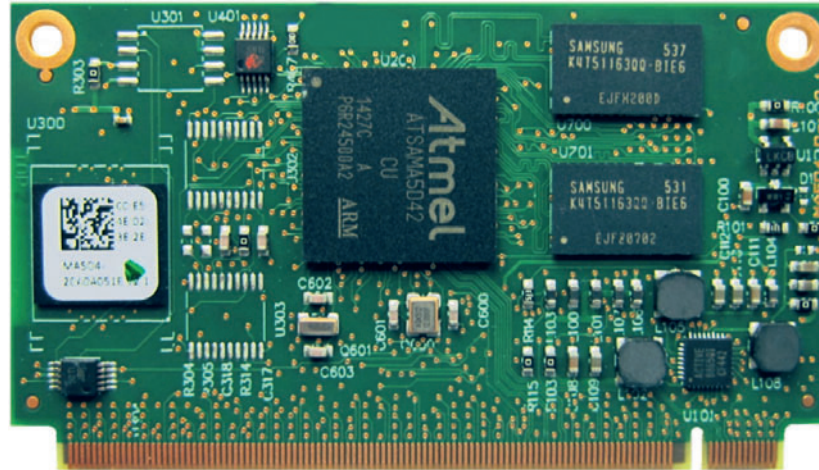
MA5D4 featureset:

- Atmel SAM A5D4 Cortex A5 @ 528MHz
- 128 – 512 MB DDR2 RAM
- Flash: 4 MB SPI NOR and 4 – 32 GB e.MMC NAND
- 720p hardware video decoder supporting H264/263, VP8, JPEG
- RTC
- 230-pin MXM2 edge connector supporting:
  - HDMI, camera CIS
  - TFT controller, overlay support for image composition
  - resitive Touchscreen controller
  - external bus A/D 25/16 bit
  - 2 x 10/100MBit Ethernet, IEEE1588 support
  - 2 x USB Host / 1x USB OTG
  - SD-card
  - 1x/2x CAN optionally
- Security features:
  - On-the-fly encr yption/decr yption of code from external DDR, Encryption engines supporting AES/3DES, RSA, ECC
  - TRNG, SHA, tamper detection pins, secure key storage
- Power Consumption: ~500mW power dissipation
- Size: 70mm x 40mm

OS Support:

- U-Boot
- Linux

MA5D4EVK Evaluation Kit

The SAMA5D4 CPU is ideal for any high-performance, secure, and cost-sensitive industrial application. High-speed computing needs are supported by ARM Neon and a 128kB L2 cache that increases the overall system performance.

The SAMA5D4 is an ideal fit for low-cost user inter face applications that require video playback. The high-grade security features allow you to protect any system against counterfeiting and software theft, while also enabling you to securely store and transfer data.
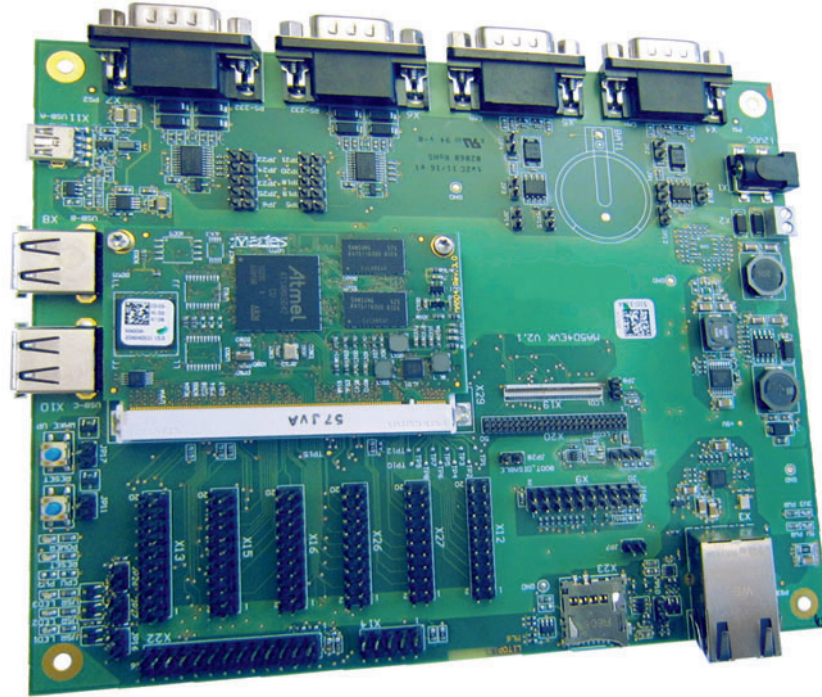
▪ MA5D4EVK featureset:

- MXM socket for MA5D4
- Ethernet 10/100MBit on RJ45
- Camera Port
- LCD Interface
- Dual UART on DSUB9
- Dual CAN on DSUB9
- USB Host
- USB Host/OTG
- microSD card slot
- JTAG
- Size: 165mm x 135mm

▪ MA5D4EVK kit contents:

- MA5D4 featuring:
  - SAM A5D4
  - 128MB DDR2 RAM
  - 4GB e.MMC NAND Flash
- MA5D4EVK
- 17,7cm (7'') LCD with touchscreen
- power supply