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Product Specifications of the EMMA Mobile™ EV0-D SoCs

CPU: Cortex™-A9 (I-cache: 32Kbyte, D-cache: 32Kbyte, 533MHz)

- AV Engine
 - H.264 decode: BP/MP/HP up to full HD (1920 × 1080) 30fps
 - MPEG2 decode: MP up to full HD (1920 × 1080) 30fps
 - MPEG4 decode: SP/ASP up to HD (1280 × 720) 30fps
 - VC-1 decode: SP/MP/AP up to full HD (1920 × 1080) 30fps
 - MP3, AAC(HE-AAC), WMA decode
 - AC-3 decode (Dolby digital 5.1ch)
- Graphics Engine: 2D (Open VG 1.1)
- DMA controller: 8 channels
- Timer: Interval timers and watchdog timers
- On-chip memory: SRAM 128Kbyte, ROM 64Kbyte
- External bus interfaces:
 - 16-bit NOR Flash interface
 - LP-DDR-400 (200MHz) / DDR2-533 (266MHz) 32-bit SDRAM interface (EV0-S)
- Image processing
 - Resizer
 - Rotator (0, 90, 180 and 270 degree)
 - Image composer with alpha blending, key color masking and gamma correction
- Peripheral interfaces
 - Serial interface: UART (6 ports), IIC (2 ports), unified serial (SPI/Audio, 4 ports)
 - SD interface (card: 1 port, SDIO: 2 ports)
 - eMMC interface
 - Image interface: Camera (Parallel), LCD (Parallel), ITU-R BT.656 interface
 - General purpose input/output
 - USB2.0: Host or Device 1 port with PHY

- Power supply
 - Core Logic: 1.1 V
 - IO: 1.8 V, 2.85V USB power supply: 3.3V
- EV0-D: 256-pin 9mm x 9mm FPBGA 0.5mm pitch, EV0-S: T.B.D.
- 40nm technology