



# STMP Family Comparison Table

Freescal’s ARM9-based STMP product line enables consumers to enjoy a true multimedia experience. Coupled with customizable software, the analog intensive, mixed-signal ICs are an ideal solution for portable electronics such as portable media

players and personal navigation devices. The STMP product line is a portfolio of system-level solutions that enable customers to rapidly introduce and offer electronic products that are small, lightweight, power-efficient, reliable and cost-effective.

	STMP3710	STMP3731	STMP3750	STMP3738	STMP3770
CPU	ARM926EJ-S	ARM926EJ-S	ARM926EJ-S	ARM926EJ-S	ARM926EJ-S
Speed (CPU/System)	360/180	360/180	360/180	360/180	360/180
I-Cache/D-Cache	16 KB/16 KB	16 KB/16 KB	16 KB/16 KB	16 KB/16 KB	16 KB/16 KB
Floating Point	-	-	-	-	-
Direct Memory Access (DMA)	16	16	16	16	16
Smart Speed™ Switch	-	-	-	-	-
Embedded SRAM	256 KB	256 KB	256 KB	256 KB	512 KB
Double Date Rate Memory (mDDR)	Yes	Yes	Yes	Yes	Yes
Flash Boot	NAND or NOR(SPI)	NAND or NOR	NAND or NOR	NAND or NOR	NAND or NOR(SPI)
Multiplier-Accumulator (MAC), Discrete Cosine Transformation/ Inverse Discrete Cosine Transformation (DCT/IDCT) Hardware Accelerator	-	-	-	-	-
Video Acceleration	-	-	-	-	-
Image Pre- and Post-Processor	Scale/CSC/Rotate	Scale/CSC/Rotate	Scale/CSC/Rotate	Scale/CSC/Rotate	Scale/CSC/Rotate
2-D/3-D Graphics	-	-	-	-	-
Security	Hardware Accelerator	Hardware accelerator	Hardware accelerator	Hardware accelerator	Hardware accelerator
Liquid Crystal Display Controller (LCDC)	8-bit QVGA	8/16-bit QVGA	8/16-bit QVGA	8/16-bit QVGA	8-bit QVGA
Universal Asynchronous Receiver/Transmitter (UART)	2	2	2	2	2
IrDA	-	IR, VFIR	IR, VFIR	IR, VFIR	-
Serial Peripheral Interface (SPI)	Up to 2	Up to 2	Up to 2	Up to 2	Up to 2
Synchronous Serial Interface/Inter-Integrated Circuit Sound (SSI/I²S)	-	Up to 2	Up to 2	Up to 2	-
Inter-Integrated Circuit (I²C)	1	1	1	1	1
Wi-Fi Support	-	-	Yes	Yes	-
Universal Serial Bus (USB)	FS/HS Device	FS/HS Device	FS/HS Host/Device	FS/HS Device	FS/HS Device
Multimedia Card/Secure Digital (MMC/SD) Controller	Up to 2	Up to 2	Up to 2	Up to 2	Up to 2
PCMCIA/Compact Flash	-	Yes	Yes	Yes	-
Memory Stick Controller	Yes	Yes	Yes	Yes	Yes
ECC8	Yes	Yes	Yes	Yes	Yes
NAND	Yes	Yes	Yes	Yes	Yes
Timer	4	4	4	4	4
Watchdog Timer	Yes	Yes	Yes	Yes	Yes
Real-Time Clock	1	1	1	1	1
Pulse Width Modulation (PWM)	x5	x5	x5	x5	x5
Package	100-pin QFP 100-pin BGA	128-pin QFP 169-pin BGA	128-pin QFP 169-pin BGA	128-pin QFP 169-pin BGA	100-pin QFP 100-pin BGA
Process Technology	90 nm	90 nm	90 nm	90 nm	90 nm

Please note:  
The product data sheet is your best source for the most current and detailed technical data on the STMP processor you prefer.  
To download the product’s data sheet, visit our Web site at [freescal.com/stmp](http://freescal.com/stmp).

