

Cost Efficient

The integration of mixed-signal analog such as power management, analog audio and A/D channels eliminates external components thereby reducing overall system bill of materials cost.

Optimized System-on-Chip

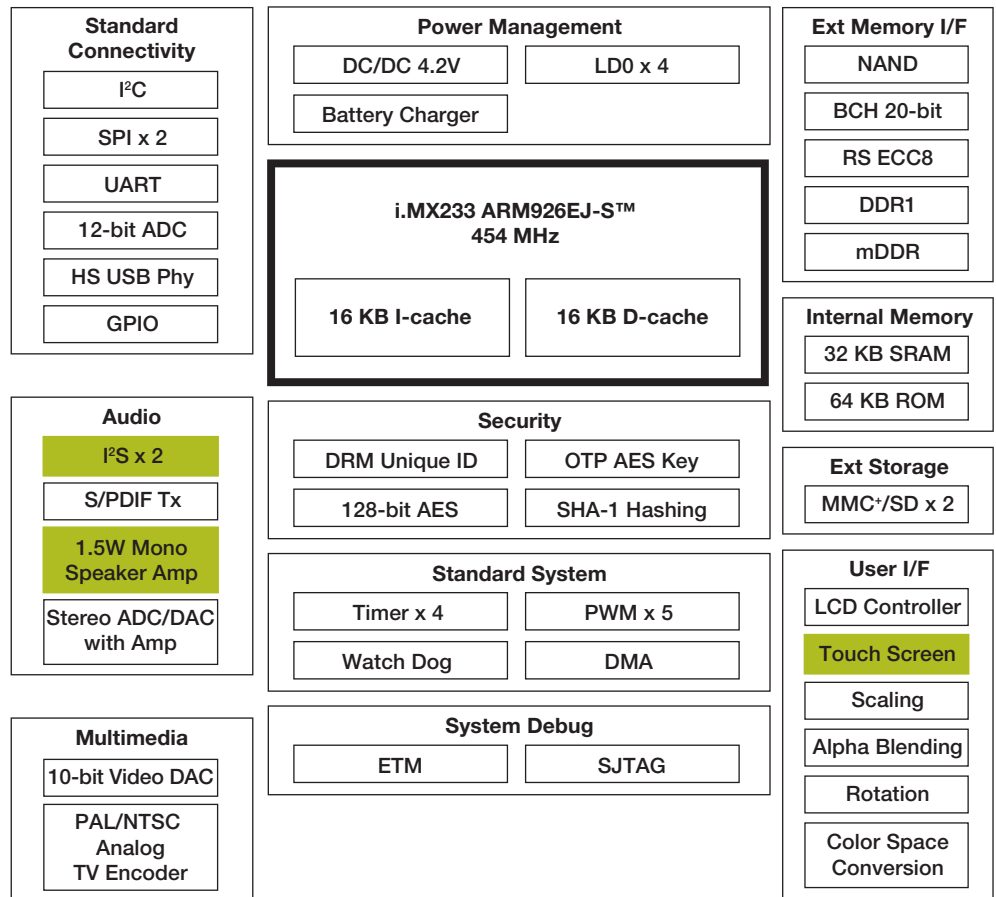
With an ARM9 core operating up to 454MHz, the i.MX233 processor is designed to maximize performance and extend battery life. An integrated power management system enables efficient MIPS per application while clock gating and multiple low power modes optimize low power performance.

The i.MX233 also includes boot from SLC, MLC and managed NANDs capability and supports up to 20-bit BCH or 8-bit Reed Solomon error correction to improve reliability.

Development Tools

Freescall delivers the i.MX233 evaluation kit that is price-effective with out compromising performance and allowing the customer to ultimately develop, debug and demonstrate the personality of their next great product. The evaluation kit includes support for Linux®, DDR1, NAND, SDIO and USB. An optional display module using a 4.3" WQVGA TFT LCD is also offered.

i.MX233 Applications Processor



Not available in QFP package

Package options		
Part Number	Temp ranges	Package
MCIMX233DJM4B	-10C to +70C	169 MAPBGA , 0.8mm
MCIMX233CJM4B	-40C to +85C	169 MAPBGA , 0.8mm
MCIMX233DAG4B	-10C to +70C	128LQFP
MCIMX233CAG4B	-40C to +85C	128LQFP

Function	128 LQFP	169 BGA
External Memory Interface	1 chip enable , 64MB	2 chip enables, 128MB
General Purpose Media Interface (GPMI)	8-bit data NAND data width	16-bit data NAND data width
LCD Interface (LCDIF)	8-bit serial	8-bit serial, 24-bit parallel
Mono Speaker Amplifier	No	Yes
Serial Audio Interface (I ² S)	0	2
A/D Channels	2	6
UARTs	1 Debug UART, 1 App UART	1 Debug UART, 2 App UARTs
Synchronous Serial Ports (SSP)	SSP1 – 4-bit data	SSP1 – 8-bit data
Rotary Encoder	Muxed with PWM, Debug UART	Dedicated
Real Time Clock (RTC)	24MHz	32kHz and 24MHz
PWM Channels	3	5

Learn More:

For current information about Freescale products and documentation, please visit www.freescale.com/imx233