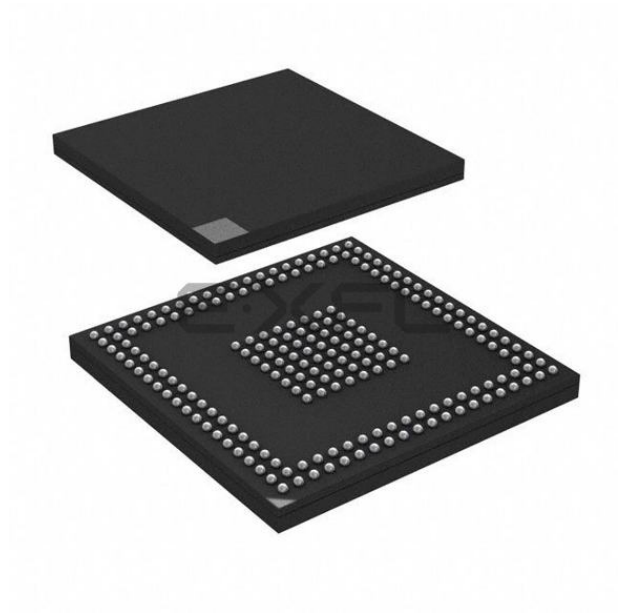

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Understanding Embedded - DSP (Digital Signal Processors)

Embedded - DSP (Digital Signal Processors) are specialized microprocessors designed to perform complex mathematical computations on digital signals in real-time. Unlike general-purpose processors, DSPs are optimized for high-speed numeric processing tasks, making them ideal for applications that require efficient and precise manipulation of digital data. These processors are fundamental in converting and processing signals in various forms, including audio, video, and communication signals, ensuring that data is accurately interpreted and utilized in embedded systems.

Applications of Embedded - DSP (Digital Signal Processors)

Details	
Product Status	Active
Type	Fixed Point
Interface	CAN, SPI, SSP, TWI, UART
Clock Rate	400MHz
Non-Volatile Memory	External
On-Chip RAM	100kB
Voltage - I/O	2.50V, 3.30V
Voltage - Core	1.20V
Operating Temperature	-40°C ~ 85°C (TA)
Mounting Type	Surface Mount
Package / Case	208-FBGA, CSPBGA
Supplier Device Package	208-CSPBGA (17x17)
Purchase URL	https://www.e-xfl.com/product-detail/analog-devices/adsp-bf536bbcz4brl

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REVISION HISTORY

2/14—Rev. I to Rev. J

Corrected typographical error from Three 16-bit MACs to Two 16-bit MACs in Features 1

Updated Development Tools 17

Added t_{HDRE} parameter to Serial Port Timing 38

Added footnotes in Serial Port Timing 38