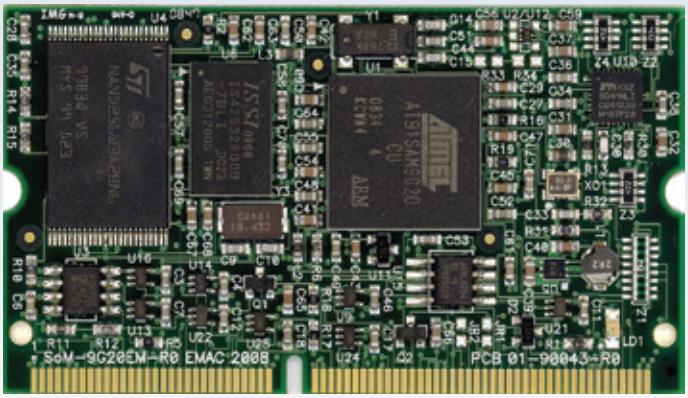
SoM-9G20M

Embedded System on Module (SoM)



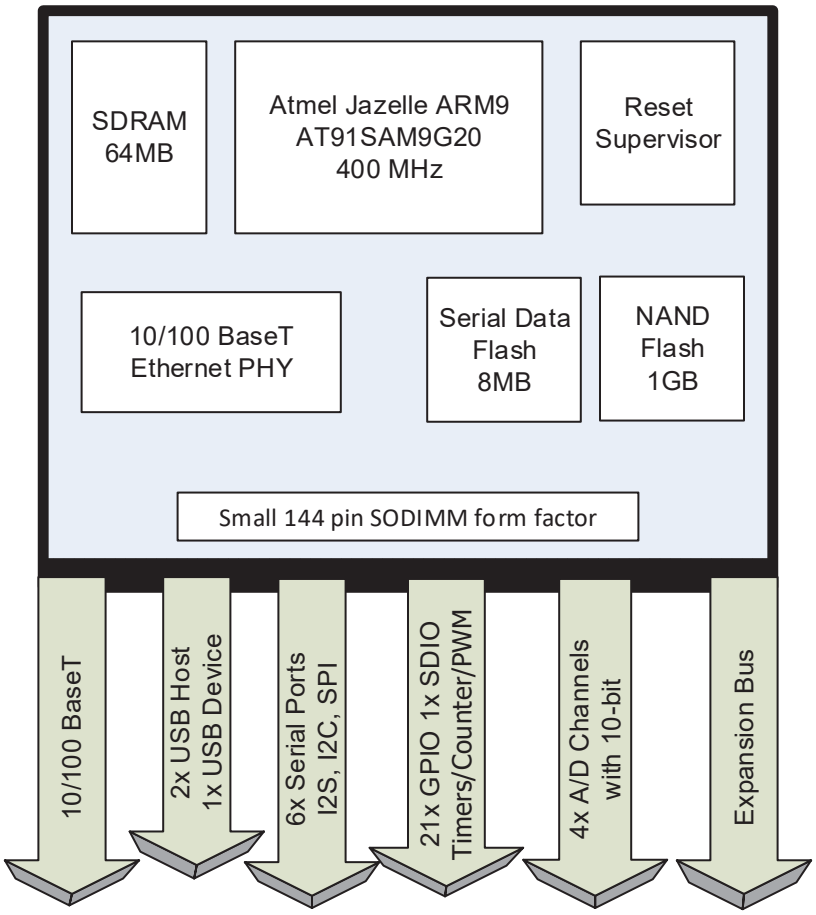
Features

- Atmel Jazelle ARM9 AT91SAM9G20 400 MHz
- 64 MB of SDRAM, 133 MHz SDRAM
- Up to 1 GB NAND, Up to 8 MB Serial Data Flash
- Ethernet, A/D, SPI, I2C, I2S PWM, GPIO
- 3x USB, 6x Serial Ports & 1x SDIO Port
- Wide Temperature -40° to + 85° C

Specifications

Processor	Embedded Atmel ARM9 Jazelle AT91SAM9G20
	400 MHz
Memory	Up to 64 MB of SDRAM, 133 MHz SDRAM
	Up to 1 GB of NAND Flash
	Up to 8 MB of Serial Data Flash
	SD/MMC Flash Card Interface
I/O	32x GPIO
	1x SDIO
	1x I2S Audio Port
	1x 10/100 BaseT Ethernet with on-board PHY
	2x USB 2.0 Full Speed Host Ports
	1x USB 2.0 Full Speed Device Port
	6x Serial ports (4x with Handshake; 7x Serial Ports Optional)
	2x SPI Ports
	5x Timer/Counters, 3x Programmable Clock Outputs, 4x PWM
	Battery backed Real Time Clock
	1x I2C Port
Analog	4x A/D Channels with 10-bit
Bus Expansion	Local ARM Bus
OS	EMAC OE Embedded Linux
Dimensions	Small 144 pin SODIMM form factor 2.66" ×1.5" (67mm × 38mm)
Power Req.	3.3 V
	Typical Running Current Consumption 200mA
Environment	-40° to + 85° C Industrial Wide Temperature
	90% Upper Operating Humidity

Block Diagram



Ordering Information

Product #	CPU	Memory	Serial	GPIO	USB	Analog	LAN	Temperature
SoM-9G20M-120	Atmel ARM9 Jazelle AT91SAM G20 400 MHz	32MB SDRAM 256MB Flash 8MB Serial Flash	6x	32x	2x FS Host 1x FS Device	4x 10-bit A/D Channels	1x 10/100 BaseT w/ On-board PHY	-40° to +85° C
SoM-9G20M-130	Atmel ARM9 Jazelle AT91SAM G20 400 MHz	64MB SDRAM 1GB NAND 8MB Serial Flash	6x	32x	2x FS Host 1x FS Device	4x 10-bit A/D Channels	1x 10/100 BaseT w/ On-board PHY	-40° to +85° C

Carrier Board Options

PRODUCT #	DESCRIPTION
SoM-150ES-000	Standard Carrier Board
SoM-150ES-007	Bare-Bones Carrier Board
SoM-150ES-031	Deluxe Carrier with A/D, D/A, Audio