COGENT
"ALWAYS COMPLETE"

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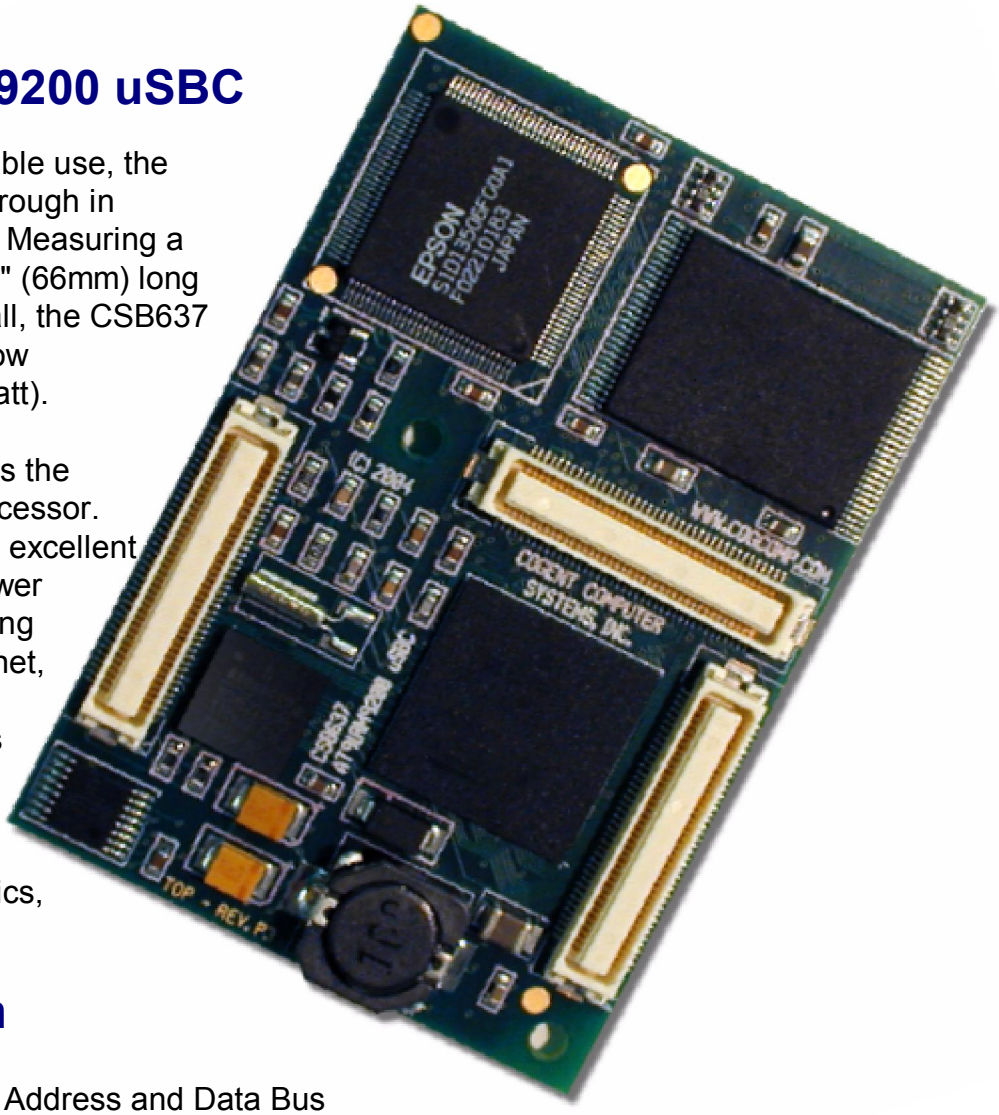
CSB637 - AT91RM9200 uSBC



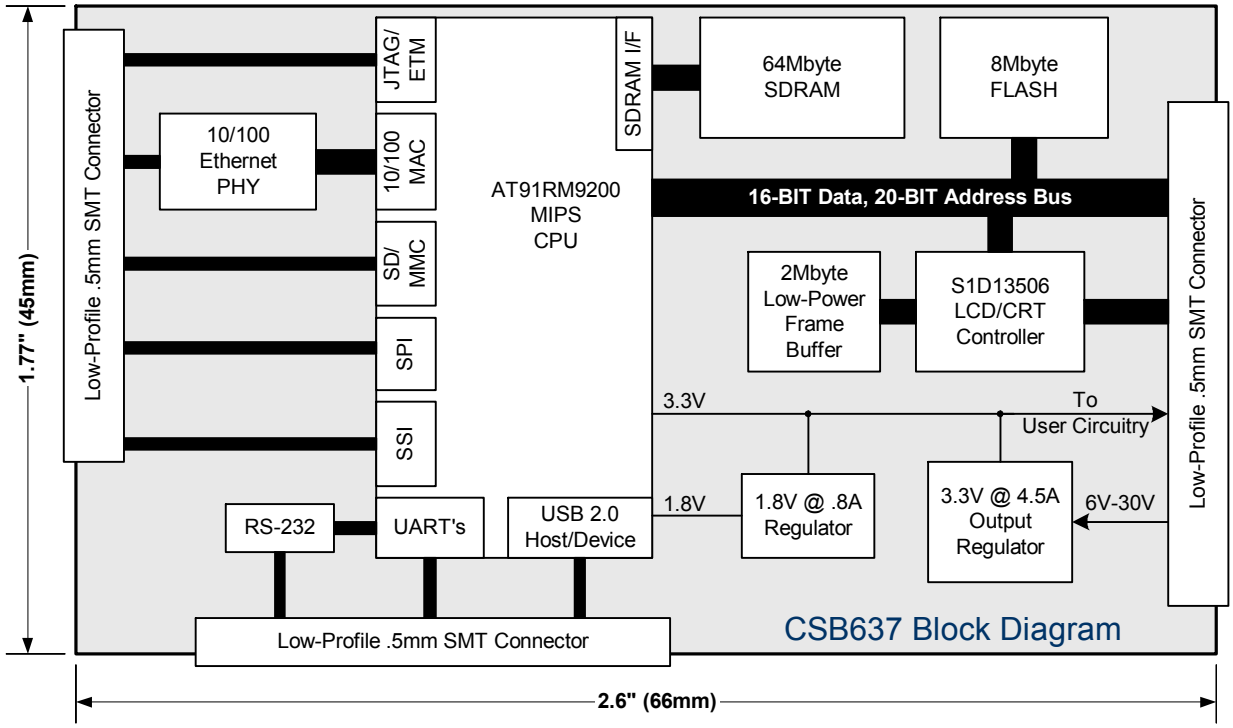
Designed for low power, portable use, the CSB637 represents a breakthrough in functionality, size and power. Measuring a mere 1.77" (45mm) wide x 2.6" (66mm) long and less than 0.355" (9mm) tall, the CSB637 packs a huge wallop at very low power levels (typically <= 1 watt).

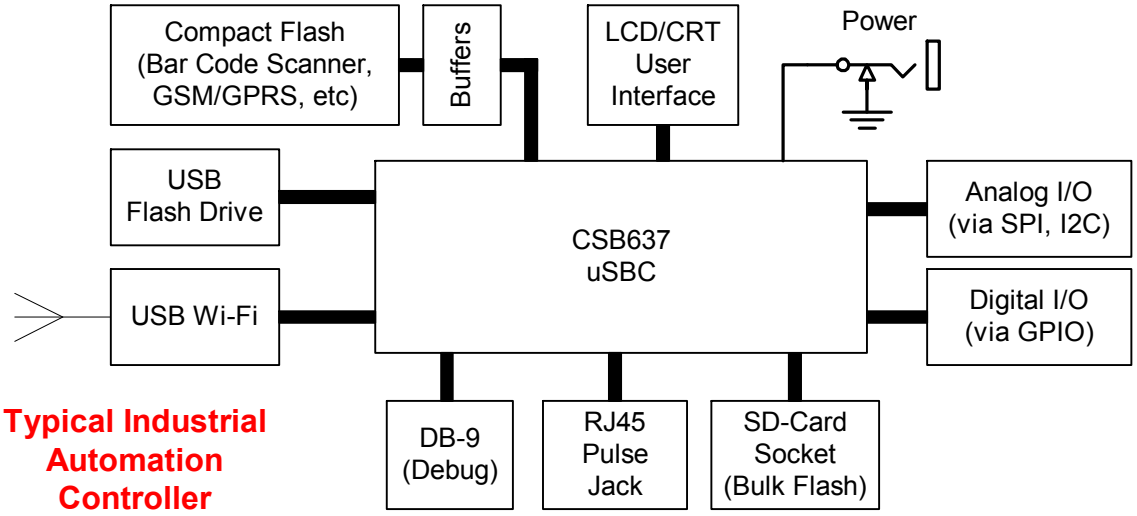
At the heart of the CSB637 lies the Atmel AT91RM9200 Microprocessor. The ARM920T core combines excellent performance with very low power consumption. This ability, along with the on chip 10/100 Ethernet, SD/MMC, 4 UARTS, SSI, SPI and Compact Flash Interfaces allows the AT91RM9200 to power low-cost, high performance products for industrial automation, telematics, medical applications, etc.

Ease of Integration

A subset of the AT91RM9200 Address and Data Bus (supporting PCMCIA, IDE and C/F) as well as all Peripherals and GPIO are made available via low profile, low cost surface mount connectors. Ultra small size, generous SDRAM and FLASH, on-board LCD/CRT Controller, 10/100 PHY and efficient 3.3V Regulator all combine to make the CSB637 the ideal engine for any size restricted, low power or battery operated application.

The CSB637 integrates many of the functions required for an industrial handheld or other portable device. The CSB637 is constructed using state of the art PCB packaging technology such as .5 and .8mm micro-BGA's, laser drilled micro-vias, via in pad and fine line geometry. The CSB637 gives you access to this technology without the risk. You can integrate the CSB637 using simple, low cost, 2 or 4 layer PCB technology, in just weeks, not months! We can even do it for you, quickly and inexpensively.





Typical Industrial Automation Controller

Example Circuit

CSB637 Specifications

- 184Mhz ARM920T Core
- 64Mbyte SDRAM
- 8Mbyte FLASH
- Single RS-232 Debug Port
- Three TTL UARTs (7-wire x 1, 4-wire x 2)
- Two Synchronous Serial Ports (SPI, I2S, etc.) and 400Khz Two Wire I/F
- USB 2.0 Host Port (x2) and USB 2.0 Device Port
- On-Board, Low Power 10/100 Ethernet Phy
- Dual 4-Bit SD/MMC Controllers
- On-Board LCD/CRT Controller (up to 800x600)
- with separate 2Mbyte Frame Buffer
- 40+ GPIO's with Interrupt Capability
- JTAG Debug Port with 16-Bit Embedded Trace
- Ultra-compact: 1.77" (45mm) wide x 2.6" (66mm) long x 0.355" (9mm)
- 95% Efficient 3.3V @ 4.5A Switching Regulator (can supply up to 3.5A to user board)
- 1W Typ., 0.75W Max. Power Consumption
- 0C to +70C Standard, -20C to +85C Optional