"ALWAYS COMPLETE"

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CSB739 - SAM9M11/SAM9G45 SODIMM SOM

The CSB739, designed, developed and manufactured by Cogent Computer Systems, Inc., is a highly integrated ARM926EJ-S SODIMM System On a Module (SOM). The CSB739 provides an ultra small, powerful, flexible engine for embedded control systems of all kinds.

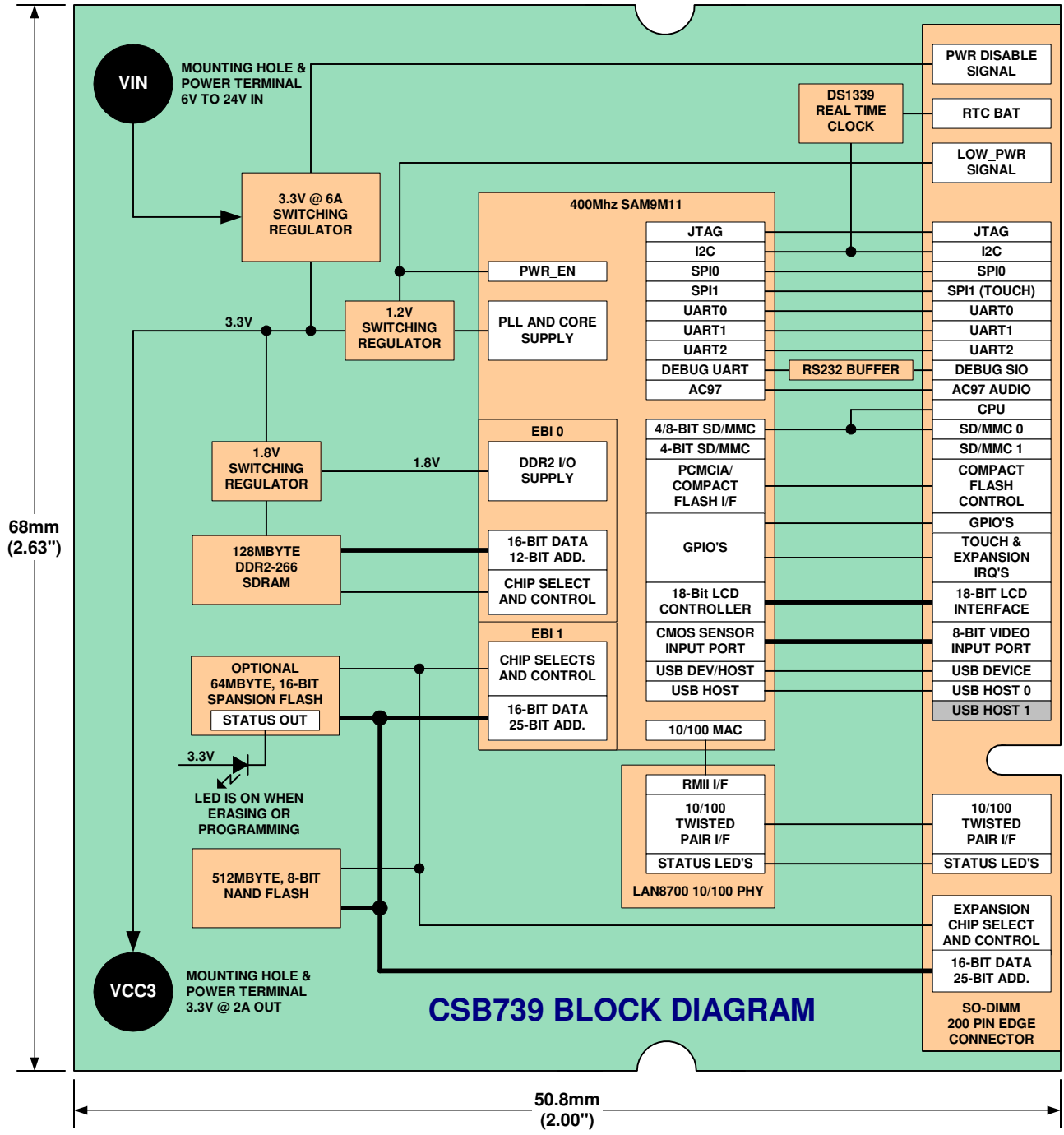
Specifications

- 400Mhz SAM9M11/SAM9G45 ARM926EJ-S CPU with 32K I-Cache and 32K D-Cache
- 64Kbytes of On-Chip, High Speed SRAM
- 128Mbyte DDR2 SDRAM
- Optional 64Mbyte S29GL512N FLASH, w/Secure 256 Byte Sector and 128-Bit Unique ID
- 512Mbyte 8-Bit NAND Flash for On-Board OS and Applications Storage
- On-Chip LCD Controller supports up to 1280 x 860 Resolution Displays
- Hardware Video Decoding (SAM9M10) supporting MPEG-2/4, H.264, VC-1 and JPEG
- 8/10-Bit Video Input Port supporting YUV4:2:2, CCIR656 and Standard CMOS Sensors
- On-Chip 10/100 Ethernet Controller with Low Power LAN8700 10/100 RMII PHY
- 480Mbit USB 2.0 Host Port and 480Mbit USB 2.0 Device Port (May also be Host)
- DS1339 Real Time Clock with Dedicated Battery Backup Input
- RS-232 Buffer for Debug Serial Port (SAM9M10 Debug UART)
- Three Additional 4-Wire TTL UARTS support Sync, Async, ISO7816 and IrDA protocols
- Dual SPI, AC97 and I2C for I/O Expansion such as Audio, A/D, D/A, etc.
- Dual SD/MMC Controller (Both 4-Bit SDIO Compliant, One with 8-Bit eMMC support)
- 25-Bit Address/16-Bit Data bus for Compact Flash and Generic Expansion
- 10 Dedicated GPIO lines (most peripherals can also be used as GPIO)
- Boot from On-Board (NAND) or Off-Board (SDIO or SPI) Memory
- On-Board, Wide Input (8V to 18V) 3.3V/6A Regulator provides 3A to the Target Board
- <750mw typical, 1000mw maximum, <50mw sleep to RAM

Introduction and Overview

Most CPU GPIO and peripherals are available via the low cost 200-pin SODIMM Edge Connector. Ultra small size, low power 400Mhz ARM926EJ-S Core, multiple serial interfaces, generous memory, 10/100 Ethernet and on-board 3.3V Regulator all combine to make the CSB739 an excellent choice for any size restricted, low power embedded system. In addition, the on-chip Hardware Video Decoding (SAM9M11 only) and the CMOS Sensor Input with YUV to RGB conversion, allow the CSB739 to target sophisticated multimedia and Video Streaming applications.

The CSB739 is constructed using state of the art PCB packaging technology such as fine pitch BGA's, micro-vias and fine line geometry. The CSB739 gives you access to this technology without the risk. You can integrate the CSB739 using a low cost, 4 layer PCB in just weeks, not months! We can even do it for you through our custom design services group.



Low Cost LCD Development Kit and I/O Expansion

The CSB739 is fully compatible with the CSB705 Development Board providing SD/MMC Socket, SDIO 802.11b/g WiFi, 10/100 Ethernet, Dual USB Host, USB Device and Audio I/O. The CSB705 also provides access to the various I/O ports of the CSB739 SOM using standard 2.54mm post headers. Finally the CSB705 allows the user to attach an optional LCD panel via the CSB705Lxx series adapter boards. Currently available are 4.3" 480x272, 4.3" 800x480, 3.5" 240x320 and 7" 800x480, all with I2C touch. Custom LCD adapters, including DVI and LVDS, are available upon request. Contact us today for more information regarding the CSB739, CSB705 and CSB705Lxx display adapters.