

"ALWAYS COMPLETE"

Cogent Computer Systems, Inc.

17 Industrial Drive, Smithfield RI 02917

tel: 401-349-3999, fax: 401-349-3998, web: www.cogcomp.com

CSB740 - 600Mhz OMAP3530 SODIMM SOM

The CSB740, designed, developed and manufactured by Cogent Computer Systems, Inc., is a highly integrated OMAP3530 SODIMM System On a Module (SOM). The CSB740 provides an ultra small, powerful, flexible engine for embedded control systems of all kinds.

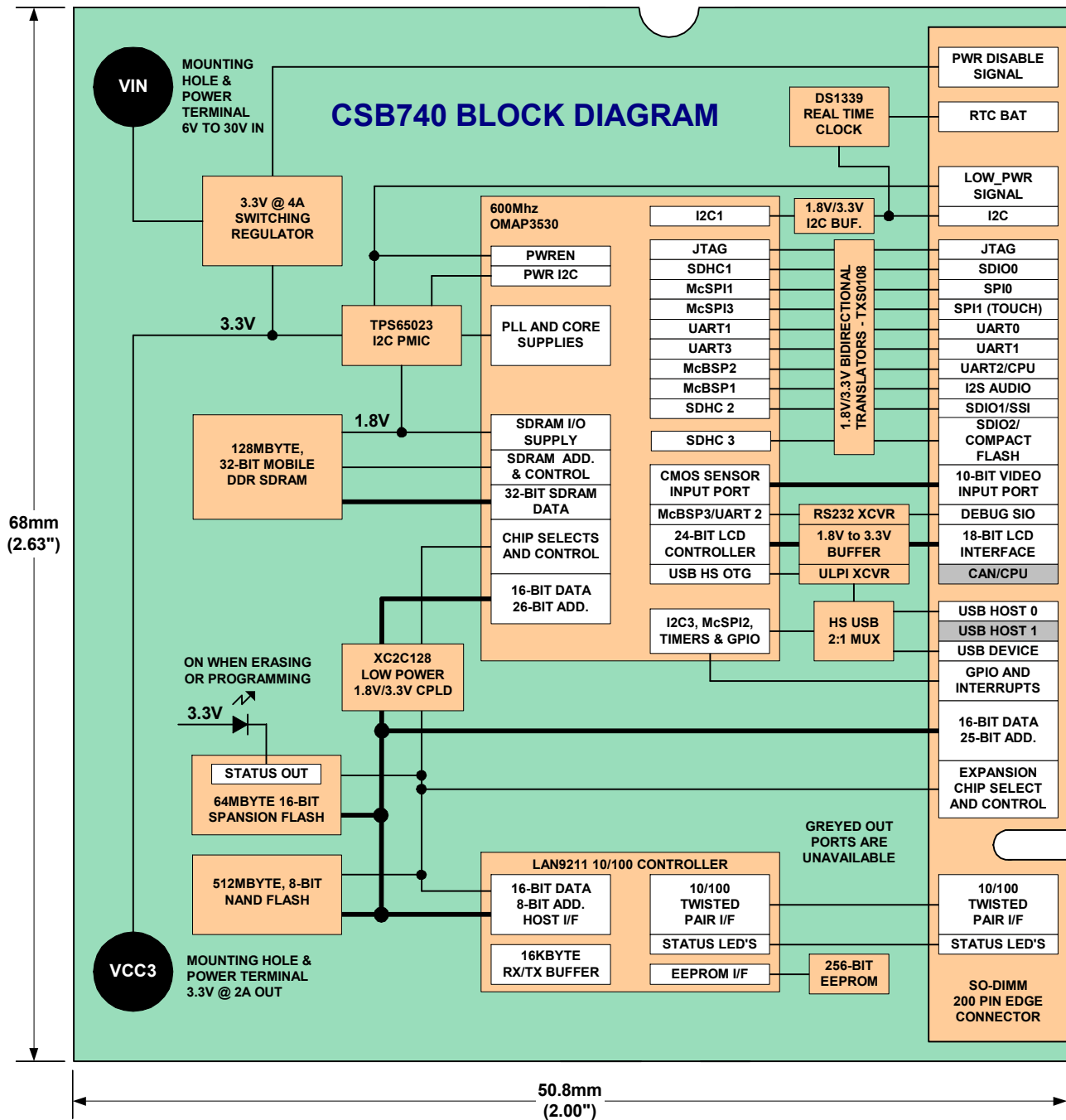
Specifications

- 600Mhz ARM Cortex-A8 Superscalar Core with 16KB I-Cache/16KB D-Cache
- 256KB L2 Cache and 64KB High Speed SRAM
- NEON Single Instruction Multi-Data (SIMD) Integer and Floating Point Coprocessor
- 128MB Mobile DDR SDRAM
- 64MB S29GL512N FLASH, with Secure 256 Byte Sector and 128-Bit Unique ID
- 512MB 8-Bit NAND Flash for On-Board OS and Applications Storage
- On-Chip LCD Controller up to 1024 x 768 with OpenGL/Direct 3D Mobile Accelerator
- On-Chip 430Mhz TMS320C64x+™ DSP Core for Video Codec and General Purpose Use
- 8/10-Bit Video Input Port supporting YUV4:2:2, CCIR656 and Standard CMOS Sensors
- High Speed (480MBit) USB 2.0 OTG Port (Routed to SODIMM Host or Device Port)
- Low Power LAN9211 10/100Mbit Ethernet Controller
- DS1339 Real Time Clock with dedicated Battery Backup Input
- 2-Wire RS-232 Debug Serial Port plus Two 4-wire TTL UARTS
- McBSP (x2), McSPI (x3) and I2C for I/O Expansion such as Touch, Audio, A/D, D/A, etc.
- Dual SD/MMC Controllers (4-Bit, SDIO Compliant)
- Buffered 25-Bit Address/16-Bit Data bus for Generic Expansion
- 10 Dedicated GPIO (may also carry some CPU Functions)
- On-Board High Speed Voltage Translators Allow Direct Interface to 3.3V Devices
- On-Board, Wide Input (6V to 35V) 3.3V Regulator provides 2A to the Target Board
- <750mw typical, 1500mw maximum, <20mw sleep to RAM

Introduction and Overview

All GPIO and peripherals are available via the low cost 200-pin SODIMM Edge Connector. Ultra small size, high performance 600Mhz Superscalar Cortex-A8 Core, NEON Vector FPU, multiple serial interfaces, generous memory, 10/100 Ethernet and on-board 3.3V Regulator all combine to make the CSB740 an excellent choice for any size restricted, low power embedded system. In addition, the on-chip 2D/3D graphics engine, TMS320C64x+™ DSP Core and CMOS Sensor Input allow the CSB740 to target sophisticated multimedia and video streaming applications.

The CSB740 is constructed using state of the art PCB packaging technology such as fine pitch BGA's, micro-vias and fine line geometry. The CSB740 gives you access to this technology without the risk. You can integrate the CSB740 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 CSB740 is fully compatible with the CSB703 Base Development Platform providing 4.3" LCD w/Touch, SD/MMC, Dual SJA1000 CAN and Audio I/O. The CSB703 provides three I/O Sites allowing access to the complete line of CSB908 I/O modules including: Two-Cell Lithium-ION Battery Charger; Dual RS-232; Dual Isolated RS-485; S-Video/Composite Video Input; 24Watt Power over Ethernet and more. Additionally, the CSB703 interfaces the CSB740 to the CSB909 series of Display Adapters. Currently these include: CSB909V6 6.5" 640x480 VGA; CSB909L7, 7" 800x480 WVGA; and the CSB909DV DVI Interface for PC monitors. Contact us today for more information regarding the CSB740, CSB703, CSB908 I/O Modules and CSB909 LCD Displays.