

"ALWAYS COMPLETE"

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CSB733 - 532Mhz MX31 SODIMM SOM

The CSB733, designed, developed and manufactured by Cogent Computer Systems, Inc., is a highly integrated ARM1136JF-S SODIMM System On a Module (SOM). The CSB733 provides an ultra small, powerful, flexible engine for embedded control systems of all kinds.

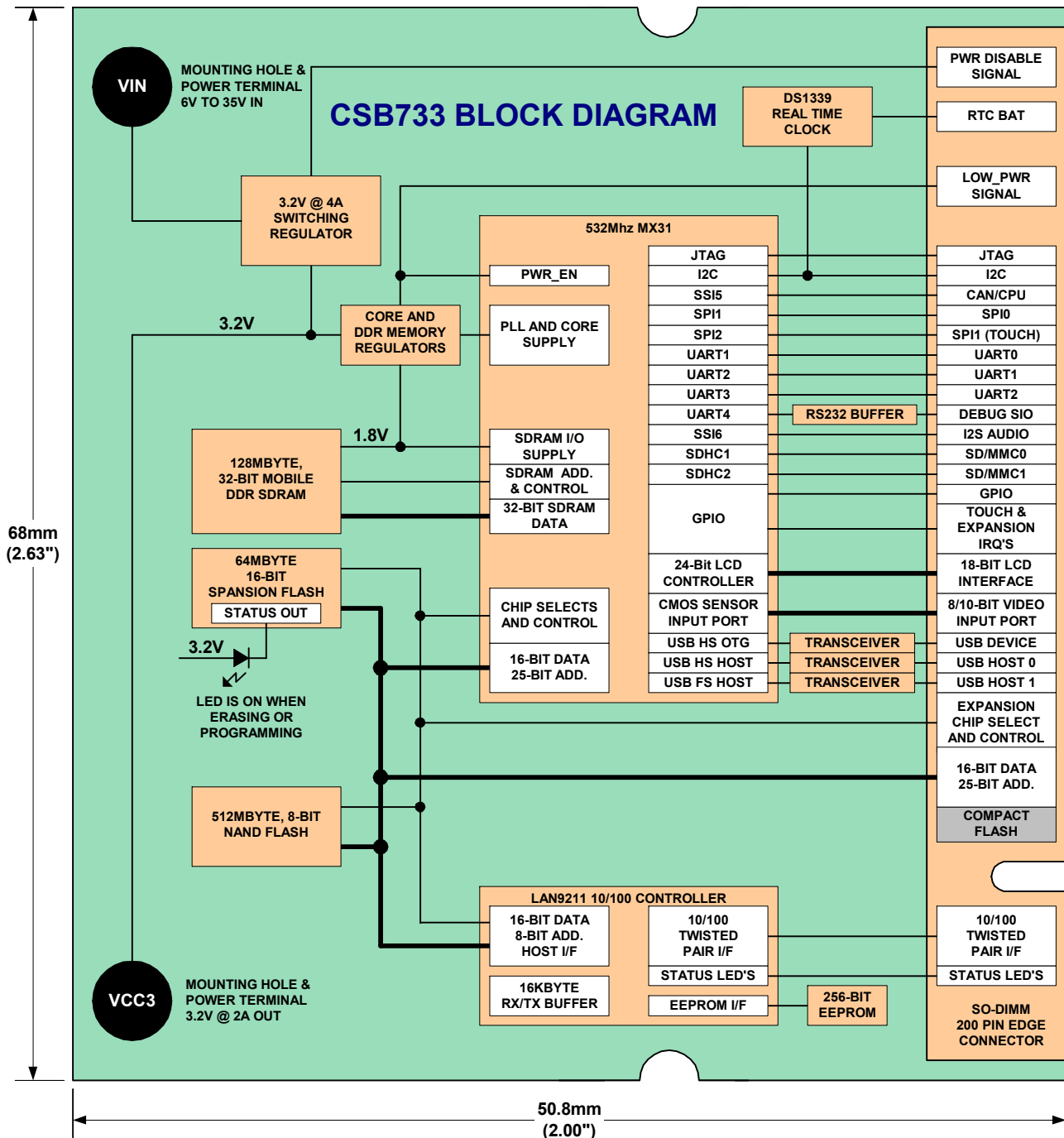
Specifications

- 532Mhz optional i.MX31 ARM1136JF-S CPU with 16K I-Cache/16K D-Cache and 64-Bit Vector Floating Point Unit (VFPU)
- 128Mbyte Mobile DDR SDRAM
- 64Mbyte S29GL512N FLASH, with 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 up to 800 x 600 with 3D MBRX Graphics Acceleration Engine
- On-Chip MPEG/H.264 Encoding HW optimized for D1 Resolution (640x480) @30 fps
- 8/10-Bit Video Input Port supporting YUV4:2:2, CCIR656 and Standard CMOS Sensors
- High Speed (480MBit) USB 2.0 Host and Device, plus Full Speed (12Mbit) USB 2.0 Host
- Low Power LAN9211 10/100Mbit Ethernet Controller
- DS1339 Real Time Clock with dedicated Battery Backup Input
- RS-232 Buffer for Debug Serial Port (MX31 UART4) plus Three 4-wire TTL UARTS
- SSI, SPI (x2), I2S and I2C buses for I/O Expansion such as Audio, A/D, D/A, etc.
- Dual SD/MMC Controllers (4-Bit, SDIO Compliant)
- 25-Bit Address/16-Bit Data bus for Generic Expansion
- 10 Dedicated GPIO lines (many peripherals can also be defined as GPIO)
- On-Board, Wide Input (6V to 35V) 3.2V 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 532Mhz ARM1136JF-S Core, VFPU, multiple serial interfaces, generous memory, 10/100 Ethernet and on-board 3.2V Regulator all combine to make the CSB733 an excellent choice for any size restricted, low power embedded system. In addition, the on-chip graphics and video acceleration engines and CMOS Sensor Input with YUV to RGB conversion, allow the CSB733 to target sophisticated multimedia and video streaming applications.

The CSB733 is constructed using state of the art PCB packaging technology such as fine pitch BGA's, micro-vias and fine line geometry. The CSB733 gives you access to this technology without the risk. You can integrate the CSB733 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 CSB733 is fully compatible with the CSB703 Base Development Platform providing 4.3" LCD w/Touch, SD/MMC, Compact Flash, 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; I2S Audio with Touch and more. Additionally, the CSB703 interfaces the CSB781 to the CSB909 series of Display Adapters. Currently these include: 6.5" 640x480 VGA; 7" 800x480 WVGA; DVI Interface for PC monitors up to 1280x1024; and LVDS up to 1024x768 XGA. Contact us today for more information regarding the CSB733, CSB703, CSB908 I/O Modules and CSB909 LCD Displays.