



- Intel® Atom™ Z500 Series
- Integrated System Controller Hub
- Small Form Factor
- Low Power
- Extended Temperature
- Customization Options

Features

Powerful - Comes with Intel Atom Z500P processor together with Intel System Controller Hub US15WP, which integrated graphics, memory and I/O

Small - The Catalyst XL is part of the Catalyst line (67x100mm format) of CoM products for logical migration in next generation designs

Low Power - Very low power consumption (less than 5W), that enables fanless designs

Extended Temperature - Supports wide operating temperature (-40 to +85°C), conformal coating options, and soldered memory

Professional Services - Cuts Time-To-Market with Eurotech Professional Services, which include deep module customization, BIOS personalization, carrier board and system design and production

Description

The Catalyst XL is a Small Form Factor CoM, based on the Intel Atom Z500P processor and the Intel System Controller Hub US15WP (Intel SCH US15W). The Intel Atom processor is implemented using 45nm, High-K technology to offer high-end performance while reducing power consumption, and is validated with the Intel SCH US15W chipset which integrates graphics, memory, and I/O into a small package.

The Catalyst XL leverages the advantages of this Intel technology to provide the precise embedded solution for high performance in low power applications. The Catalyst XL comes in the 67x100mm small form factor and offers comprehensive I/O and multimedia capabilities while consuming less than 5W of power per system. The adapter board gives customers the option to either start with a standard version or design their own to meet unique application requirements while reducing time to market.

The Catalyst XL offers further flexibility by supporting several operating system options including Microsoft Windows Embedded Standard, CE, Wind River Linux 3.0, and targeted real time operating systems (RTOS).

Specifications

| | | |
|-----------------------|--|---|
| PROCESSOR | CPU | Atom Z500P/PT, up to 1.6GHz, 533MHz Front Side Bus – Intel System Controller Hub US15WP/PT (Intel SCH US15W) |
| MEMORY | RAM | Up to 2GB 533MHz (DDR2) |
| STORAGE | Embedded | Up to 3x SD/MMC Cards, up to 2x PATA Disk Drives |
| I/O INTERFACES | Ethernet | 1x 10/100/1000Mbps |
| | USB | Up to 8x USB 2.0 |
| | Serial | 1x RS-232, 1x RS-485 Optoisolated |
| | CAN bus | Yes |
| | Digital I/O | Multiple GPIOs, Analog I/Os |
| | SDIO | 1x SDVO |
| | Video | Video Interfaces: UXGA, XGA, SXGA, HD – Codecs: H.264, MPEG-4/2/1, Windows Media-9, DivX – Dual Independent Display Output Capability |
| | Audio | Intel High Definition Audio (Microphone and Speaker Audio) |
| | PCI Express | 2x PCIe x1 |
| | LPC | Yes |
| | I2C | Yes |
| | SMBus | Yes |
| Other | 4/5wire Touch Screen Interface, IrDA Interface | |
| OTHER | RTC | Yes |
| | TPM | Factory Option |
| POWER | Consumption | 2-3W Typ (Typical Sustained Power Consumption < 5W) |
| | Management | Advanced Power Control, System Health/Environmental Monitor, ACPI Power Management |
| ENVIRONMENT | Operating Temp | - 40 to +85°C or 0 to +70°C |
| | Storage Temp | - 40 to +85°C |
| MECHANICAL | Dimensions | 67x100mm (LxW) - Catalyst Form Factor |
| SOFTWARE | OS | Support for Microsoft Windows Embedded Standard, CE, Wind River Linux 3.0 – Specific RTOS Support (call for details) |

Block Diagram

