High Performance Module Based on Dual Core Intel Atom

Catalyst LP

- Dual core for high-speed applications
- 400MHz graphics engine
- High bandwidth I/O
- Eurotech's Everyware Software Framework helps speed up development time while making application development portable and robust
- Full-featured, application-ready development kits







FEATURES

CPU – Intel Atom N450 and D510 with Intel ICH8M companion chip

Memory/boot options – Up to 2GB of DDR2 SDRAM, SD/MMC slots, dual SATA, and SSD Flash support up to 32GB

Multimedia – VGA, 18-bit color LVDS, dual display, Intel® HD Audio

Mechanical – Fanless 67 x 100 mm form factor

Power management – Power management across operating systems with consumption specs at 7W – 9W typical for single core and 11W – 13W typical for dual core

Connectivity & I/O – PCle, Gigabit Ethernet and USB 2.0

Operating system – Pre-loaded Windows Embedded Standard or Wind River Linux

Software framework – Eurotech's Everyware™ Software Framework based on Java VME, with simplified foundation bundles supported allowing for fast application-specific code development.

The Catalyst LP, based on the Intel Atom N450 and D510 processors and the Intel ICH8M companion chip, offers dual core processing, high end graphics, rich high speed I/O, and more. All of this capability is brought out in the fanless 67×100 mm form factor typical of the Catalyst product family.

With a 400MHz graphics engine, the Catalyst LP offers high-performance graphics with 2-D and 3-D visualization for markets where high-resolution displays are critical, such as in digital signage. In addition, high bandwidth I/O capability and data storage interfaces like SATA make the Catalyst LP ideal for applications requiring extensive data retrieval and processing such as those in the industrial, medical, or human-machine interface markets. The compact, fanless design is well suited for devices both small and powerful.

The Catalyst LP supports Windows Embedded Standard and Wind River Linux 3.0. Support for Eurotech's Everyware™ Software Framework (ESF) and Eurotech Device Cloud (EDC) are coming soon. Contact us for availability.



Catalyst LP

Specifications

High Performance Module Based on Dual Core Intel Atom

System Architecture	
PROCESSOR	 Intel® Atom™ Processor N450 (single core)
	 Intel® Atom™ Processor D510 (single core)
	Intel® ICH8M companion chip
RAM MEMORY	Up to 2GB DDR2 SDRAM at 667MHz
FLASH MEMORY	Optional on-board SSD Flash support up to 32GB
OPERATING SYSTEM	Windows Embedded Standard Windows Embedded Standard
	Wind River Linux Other RTOS (a set-out for details)
SOFTWARE FRAMEWORK	Other RTOS (contact for details) Francisco M. Seftware Francisco R. Francisco M. Seftware Franc
NETWORK	Everyware [™] Software Framework 10/100/1000 BASE-T Ethernet (magnetic only resident on carrier board)
USB	• 9x USB 2.0 ports
035	USB port disable capability
I2C	I2C bus
LPC	LPC bus
SM Bus	SM Bus interface
VIDEO	1x LVDS interface with 18-bit color
	• 1x VGA interface
	Dual independent display output capability
AUDIO	Intel® High Definition Audio
TRUSTED PLATFORM MODULE	TPM available on set configurations
EXPANSION BUSES	4x one-lane PCle interfaces or optionally 1x four-lane
	• 2x SATA interface
	• 2x SD/MMC interfaces
POWER	3.3V and 5.0V (± 5%)
TEMPERATURE	Operating: 0°C to +70°C
PHYSICAL	Dimensions: 67 x 100 mm
ADAPTER BOARD EXPANDABILITY	Customization options include:
	Serial ports (RS-232, RS-485, optically isolated)
	4/5/8-wire touchscreen interface
	Parallel port
	Digital I/O
	Analog I/O
	CanBUS
ODDED CODES	Microphone and speaker audio
ORDER CODES	 900125-1006R: Catalyst LP Module Intel Atom D510 (dual core), C Temp, 1.6GHz, 1GB DRAM
	• 900125-1007R: Catalyst LP Module Intel Atom D510 (dual core), C Temp,
	1.6GHz, 2GB DRAM, 8GB Flash SSD, TPM
	• 900125-1008R: Catalyst LP Module Intel Atom N450 (single core), C Temp,
	1.6GHz, 1GB DRAM
	CTLP1007: Catalyst LP Development Kit, Catalyst LP Module Intel Atom
	D510 (dual core), C Temp, 1.6GHz, 2GB DRAM, 8GB MMC, 4GB
	CompactFlash®, TPM
	CTLP1008: Catalyst LP Development Kit, Catalyst LP Module Intel Atom
	N450 (single core), C Temp, 1.6GHz, 1GB DRAM, 4GB CompactFlash®

Note: The information in this document is subject to change without notice and should not be construed as a commitment by EUROTECH. While reasonable precautions have been taken, EUROTECH assumes no responsibility for any error that may appear in this document. All trademarks or registered trademarks are the properties of their respective companies.



North America

sales.na@eurotech.com

Europe, Middle East and Africa sales.emea@eurotech.com

Latin America sales.la@eurotech.com

Asia Pacific sales.ap@eurotech.com ETH_Catalyst LP_DS_02/2011