Catalyst BT

Catalyst Module - Intel Atom E3800



- **Intel® Atom™ E3800 Series**
- **Small Form Factor**
- **ECC Memory**
- **Extended Temperature**
- **Power Management**
- **Customization Options**
- **IoT Middleware and Platform**

Features

Powerful - Comes with Intel Atom E3800 CPU: one, two and four core configurations, up to 1.91GHz
Small - Extends the Catalyst line (67x100mm format) of CoM products for logical migration in next generation designs
Reliable - Offers memory configurations up to 4GB with ECC, and virtualization for data integrity and system uptime
Rugged - Supports wide operating temperature (-40 to +85°C), conformal coating options, soldered memory and flash storage
Power Management - Lowers power consumption even further with Eurotech's microcontroller-based power management, enabling fanless designs
Professional Services - Cuts Time-To-Market with Eurotech Professional Services, which include deep module customization, BIOS personalization, carrier board and system design and production
IoT Native - Provides native support for IoT, including IoT middleware and access to Eurotech IoT Integration Platform

Description

The Catalyst BT is a Small Form Factor CoM based on Intel E3800 series (code name Bay Trail), which offers extremely low power consumption in its system on chip (SoC) format, without a companion chip. The Catalyst BT models include the E3800 series quad-core, dual-core and single-core options, with different clock speeds and cache sizes for each configuration.
The Catalyst BT is designed to perform reliably in systems that operate in harsh environments, and supports an extended temperature range (-40 to +85°C).
The Catalyst BT further reduces the power consumption of the chipset with microcontroller-based technology, making it the ideal platform for fanless, power constrained systems.
The Catalyst BT accelerates the development and deployment of IoT applications: it supports EC, the Eurotech IoT Integration Platform for embedded devices. EC is a complete offering consisting of open field protocols, cloud-based resources like databases and brokers, and REST APIs.
The Catalyst BT also supports ESF, Eurotech java-based framework for embedded devices. With ESF it is possible to develop portable applications in a fraction of the time thanks to high level, industry specific APIs.

Catalyst BT

Catalyst Module - Intel Atom E3800

Specifications		
PROCESSOR	CPU	Atom E3815 1.46GHz, 1 Core – Atom E3827 1.75GHz, 2 Cores – Atom E3845 1.91GHz, 4 Cores
MEMORY	RAM	Up to 4GB 1333MHz (DDR3L-ECC) – Factory Option: up to 8GB 1333MHz (DDR3L Dual Channel w/o ECC)
STORAGE	Embedded	8GB to 32GB SATA SSD Soldered-down – Factory Option: 8GB to 32GB eMMC Soldered-down (SATA SSD and eMMC Mutually Exclusive)
	SATA	Up to 2x SATA 2.0
	Other	1x SD 3.0
I/O INTERFACES	Ethernet	1x 10/100/1000Mbps with Manageability Features, IEEE 802.1 Q, VLAN, Jumbo Frames - 9KB, IEEE 1588/802.1 AS (per packet)
	USB	8x USB 2.0 – Factory Option: 1x USB 3.0
	Serial	2x Serial (TX/RX)
	Digital I/O	6x GPIO
	SDIO	Factory Option: SDIO 3.0
	Video	2x High Resolution Display Output Ports: 1x eDP/DP/HDMI/LVDS Options, 1x eDP/DP/HDMI/VGA Options (eDP 1.3 up to 2560x1600, DP 1.1a, HDMI 1.4a up to 1920x1080, Single Channel LVDS) – Support for VP8, MPEG2, H.264, VC-1, HD 1080p at 60fps, Flash and WMP
	Audio	High Definition Audio Interface
	PCI Express	3x PCIe x1 (Gen 2) – Factory Option: Additional 1x PCIe x1 (Gen 2) with Gb Ethernet Disabled
	LPC	Yes
	I2C	Yes
	SMBus	Yes
OTHER	RTC	Yes
	TPM	Factory Option
ENVIRONMENT	Operating Temp	- 40 to +85°C
	Storage Temp	- 40 to +85°C
CERTIFICATIONS	Environmental	RoHS2, REACH
MECHANICAL	Dimensions	67x100mm (LxW) - Catalyst Form Factor
SOFTWARE	OS	Wind River Linux 7, WES 7, Windows 10 IoT Enterprise Support
	IoT Framework	Everyware Software Framework Ready, Everyware Cloud Ready

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.