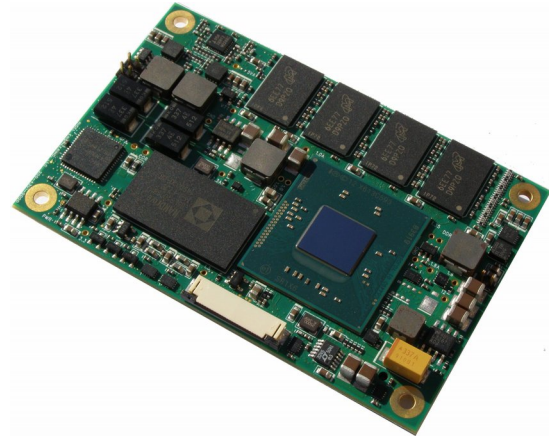




Custom solutions with off-the-shelf pricing

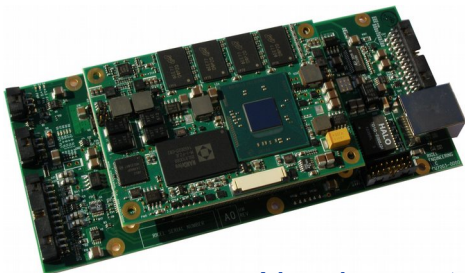


CM4301

Intel® Atom™ 3800 Series COM Express Mini Type 10 Processor Module

Features:

- ★ Single, dual or quad core Intel® Atom™ 3800 Series (Bay Trail–I)
- ★ Extended temperature rugged design for harsh applications
- ★ COM Express Mini form factor (55 x 84mm) with type 10 pinout
- ★ Air or conduction-cooled
- ★ Up to 4GB dual-channel, low power DDR3L with ECC
- ★ On-board temperature sensor
- ★ Gigabit Ethernet port
- ★ Up to 64GB of embedded SATA
- ★ Additional COM Express SATA port
- ★ Intel HD Audio
- ★ USB 3.0 Port
- ★ Four USB 2.0 ports
- ★ Two serial ports
- ★ Three PCI Express 2.0 lanes
- ★ 4 General purpose inputs
- ★ 4 General purpose outputs
- ★ Low pin count (LPC) bus
- ★ HDMI display port
- ★ Open source coreboot bootloader
- ★ Rigel's Standard 3 Year Warranty



Need a custom carrier or development platform?

Rigel's model CM4301 COM Express® processor module is based on the Intel® Atom™ 3800 series processor and was designed to perform reliably in harsh environments. The CM4301 is a COM Express® Mini form factor (55mm x 84mm) SBC that supports type 10 signaling and an array of features. The CM4301 is available with up to a quad core 3845 processor running at 1.91GHz and 4GB of low-power DDR3L ECC SDRAM.

The CM4301 also supports the open source coreboot boot loader which is an extended firmware platform that delivers a lightning fast and secure boot experience on modern computers and embedded systems.

The CM4301 features many standard features such as gigabit Ethernet, USB 3.0, four USB 2.0 ports, up to 64GB of embedded SATA, HDMI, Intel HD Audio, two serial ports, 8 GPIO and three PCI Express 2.0 lanes. This feature rich product enables it to be a perfect fit for applications in the automation, embedded, commercial, transportation, military and aerospace industries.

Contact our experienced engineering team to learn more about the CM4301.

Hardware Specifications

Processor

- ★ Intel® Atom™ E3800 family (formerly Bay Trail-I)
- ★ Single, dual or quad core configurations (up to 1.91GHz)

Memory

- ★ Up to 4GB of soldered (memory down) DDR3L-1333 ECC
- ★ Single or dual channel configurations
- ★ 64Mb SPI boot flash
- ★ Up to 64GB of embedded SATA

Graphics

- ★ DVI or HDMI support
- ★ Intel's 7th gen graphics and media encode/decode engine
- ★ 1920x1080 Max resolution

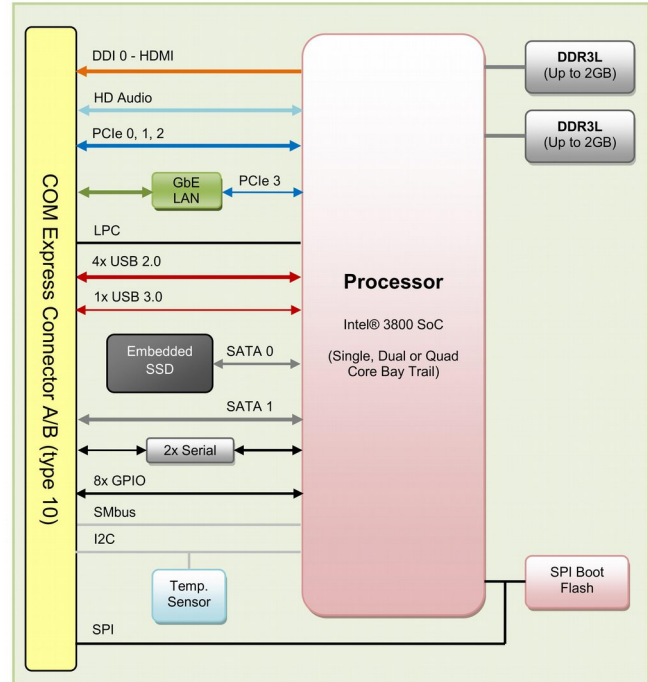
COM Express

- ★ Gigabit Ethernet interface
- ★ 3x PCI Express lanes (Gen 2.0)
- ★ SATA interface
- ★ USB 3.0
- ★ 4x USB 2.0
- ★ Low Pin Count (LPC) bus
- ★ Intel's High Definition Audio (HDA)
- ★ DDI (DVI or HDMI)
- ★ SMB & I2C
- ★ 2x Serial ports
- ★ 4x General Purpose Inputs
- ★ 4x General Purpose Outputs

Physical / Electrical / Environmental

- ★ Standard COM Express form factor (55mm x 84mm)
- ★ 1.3 oz / 37 grams (no heat sink)
- ★ +12V Maximum / typical power :

(Single core):	TBD / TBD
(Dual core):	TBD / TBD
(Quad core):	.9A / .6A
- ★ Temperature:
 - Operating (Commercial) : 0°C to +70°C
 - Operating (Extended) : -40°C to +85°C
 - Storage : -40°C to +85°C
- ★ Relative Humidity:
 - Operating: 5% to 95%, non-condensing
 - Storage: 5% to 95%, non-condensing



Ordering Information

CM4301-xxxx

Base Model _____

Operating Temperature & Cooling Options _____

0 = 0°C to +70°C, Air Cooled
 1 = -40°C to +85°C, Air Cooled
 2 = -40°C to +85°C, Conduction Cooled
 Z = Customer specific board configuration

Number of Cores _____

1 = Single Core (3815 – 1.46 GHz)
 2 = Dual Core (3825 – 1.33 GHz)
 4 = Quad Core (3845 – 1.91 GHz)

DDR3L Configuration _____

1 = 1GB Single Channel
 2 = 2GB Single Channel
 3 = 4GB Single Channel
 4 = 2GB Dual Channel
 5 = 4GB Dual Channel

On-Board SSD _____

0 = No Embedded SSD
 1 = 8GB Embedded SSD
 2 = 16GB Embedded SSD
 3 = 32GB Embedded SSD
 4 = 64GB Embedded SSD

At Rigel Engineering, we are dedicated to working directly with your Engineers and System Designers to provide the best possible solution that meets or exceeds your requirements.

Custom solutions with off-the-shelf pricing