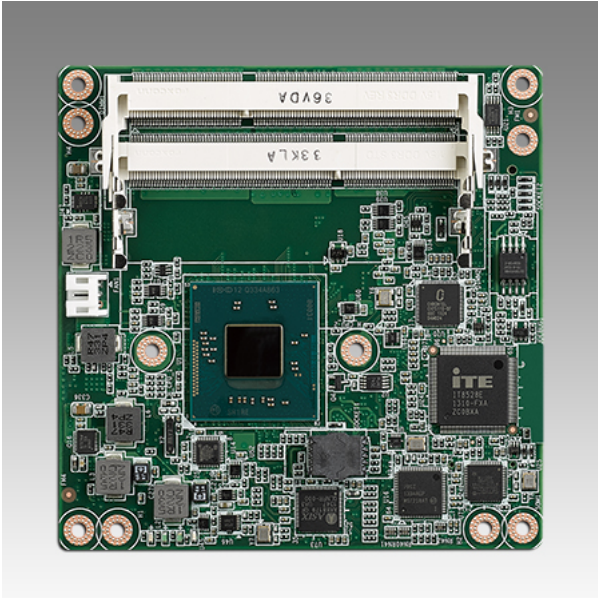


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SOM-6867



- Intel Atom/Celeron Processor E3845/E3827/J1900
- fUp to 8GB DDR3 in 2x SODIMM sockets
- fSupports VGA, LVDS, HDMI/DVI/DisplayPort
- fSupport 3 PCIe x1, 8 USB2.0, USB3.0, 2 SATAII, LPC, SMBus, I2C
- fSupports iManager, SUSIAccess and Embedded Software APIs

Board Information

- Pin Definition: PICMG COM.0 R2.1 Type 6 pin-out definition
- Form Factor: PICMG COM.0 R2.1 Compact Module 95 x 95 mm
- CPU: Intel® Atom/Celeron Processor
- Memory: 2 SODIMM Socket for DDR3L-1333/1066, up to 8GB
- BIOS: AMI UEFI SPI BIOS
- Power management: Supports power saving modes including Normal / Standby / Suspend modes. ACPI 2.0 compliant

Display:

- Graphic Core: Intel® HD Graphic supports DX11.1, OGL3.0, PCL1.2 and
- MPEG2, AVC/H.264, VC-1 HW decode/encode/transcode acceleration
- VGA: Resolution up to 2560 x 1600
- LVDS: Supports single/dual channel 18/24-bit, resolution up to 1920 x 1200
- HDMI/DVI/DP: Supports 2 ports HDMI, DVI, or DP multiplexed.

Expansion Interface

- PCI Express x1: Support default 4 ports PCIe x1 compliant to PCIe Gen2 (3.0GT/s) specification, several configurable combinations may need BIOS modifies.
- Please contact Advantech sales or FAE for more details.
- Audio Interface: Intel HD Audio interface
- LPC Bus
- SMBus
- I2C Bus
- SPI

I/O

- Ethernet: Intel I210 Gigabit LAN supports 10/100/1000 Mbps Speed
- SATA: Supports 2 ports SATA Gen2
- USB Interface: Supports 1 port USB3.0, 8 ports USB 2.0
- Serial Port: Supports 2 ports 2-wire serial port
- Express Card: 2 ports
- Panel Control: Supports panel backlight on/off control, brightness control
- Thermal Protection: Supports thermal shutdown or CPU throttling
- Watchdog Timer: 65536 level timer interval, from 0~65535 sec, multi-level, multi-option watchdog timer
- Smart Fan: 1 port on Module, 1 port down to carrier board
- GPIO: 8-bit GPIO
- Hardware Monitor: Vin, 5VSB, CMOS

SOM-6867 is a COM-Express Compact module with pin-out Type 6 that fully complies with the PICMG (PCI Industrial Computer Manufacturers Group) COM.0 R2.1 specification. The CPU module incorporates an Intel Atom E series and Celeron N/J series processor and other peripheral chips to fulfill COM specific functions. The Intel latest processor uses 22nm. This generation brings 3 times more performance improvements than previous generations, and integrates powerful Intel HD Graphics as well as DX11.1, OpenGL3.0, OCL1.2 MPEG2, AVC/H.264, and VC-1 HW decode/ acceleration. SOM-6867 provides a variety of interfaces such as PCI Express, SATA Gen 2 USB3.0, USB client, and advanced optional functions for on-board storage. Moreover, PCIe x4 can be used as x4 or x1 - making SOM-6867 more flexible.

SOM-6867 is suitable for entry level portable computing applications needing thermally sensitive, rugged, graphics/media/display and I/O demanding designs.

Specifications

SOM Type:
COM Express Modules

Processor

Processor:
Intel Atom E3800 Family Processor

Clock Speed:
2 GHz

Real Time Clock:

Processor Misc.:

- Intel® Atom™ E3800 Product Family/Celeron® N2000 Series SoC Processor
- J1900: Quad Core 2.0-2.42 Ghz/ 10W
- E3845: Quad Core 1.91 GHz/ 10W
- E3827: Dual Core 1.75 GHz/ 8W

Memory

BIOS/ Bootloader:

AMI EFI 16 Mbit

Primary Flash:

SATA

Secondary Flash:

onboard flash optional- MLC flash Up to 64GB or SLC up to 32GB

Memory Misc.:

2 DDR3L SODIMM sockets, supporting dual channel memory up to 8GB total

Primary I/O

GPIO:

8x GPIO

Disk Interface:

SATA

SPI:

1 channel (SPI BIOS EEPROM)

Video Out:

DDI & LVDS

Audio:

HD Audio

Ethernet:

Intel i210 Gigabit Ethernet

USB:

1 x USB 3.0 & 8 x USB 2.0

Serial Ports:

2x COM (2-Wire)

Watchdog:

Secondary I/O

LPT Port:**Keypad:****PS/2:**

Analog on

A/D:**D/A:**

Dimensions

Dimensions:

3.74 × 3.74 in

Form Factor:

COM Express compact

Dimensions Misc.:

Dimensions 95 x 95 mm (3.74" x 3.74") Semi-Heatsink 95 x 95 x 16.25 mm Semi-Cooler with fan 95 x 95 x 33 mm

Power Requirements

Voltage:

12 V

Idle Current:

1.01 A

Max Boot Current:

1.73 A

Power Misc.:

- Power Consumption (Max.)

+12V @ 1.73A (J1900)

+12V @ 1.28A (E3845)

- Power Consumption (Idle)

+12V @ 1.01A (J1900)

+12V @ 0.79A (E3845)

Environmental

Low Operating Temperature:

0 C

High Operating Temperature:

60 C

Upper Operating Humidity:

95%

Environmental Misc.:

Optional Operating: -40 ~ 85° C (-40 ~ 185° F)

Pricing

SOM-6867AC-S7

SOM-6867AC-S7A1E, E3827 2x1.75GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP

\$260.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

SOM-6867AC-S9

SOM-6867AC-S9A1E, E3845 4x1.91GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP

\$275.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

SOM-6867AX-S7

SOM-6867AX-S7A1E, E3827 2x1.75GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP (-40~85C)

\$305.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

SOM-6867AX-S9

SOM-6867AX-S9A1E, E3845 4x1.91GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP (-40~85C)

\$320.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

SOM-6867RC-U0

SOM-6867RC-U0A1E, J1900 4x2.0GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP

\$255.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

SOM-6867AC-S3

SOM-6867AC-S3A1E, E3825 2x1.33GHz, SODIMM, 2xSATA, 2xCOM, USB3, 8xUSB2, GbE, VGA, DP

\$260.00

Order:

0

Parent Product:

SOM-6867

Base Product:

SOM-6867

Non-Stock NCNR:

0

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