

SOM-6894



Embedded 4th Generation Intel® Core™ i7/i5/i3/Celeron® processor (U-Processor Line)

up to 16 GB DDR3L SODIMM

8x USB 2.0, 2x USB3.0, 4x SATA, 1x GbE

3 independent displays: VGA, LVDS, HDMI/DisplayPort/DVI

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

Memory: 2 SODIMM Socket for DDR3L-1600, up to 16 GB

BIOS: AMI UEFI BIOS @ 128Mb

Power management: Supports power saving modes including Normal / Standby / Suspend modes. ACPI 2.0 compliant

Display:

Graphic Core: Intel® HD Graphic supports DX11.1, OGL3.2, OCL1.2

VGA: Resolution up to 1920 x 1200

LVDS: Supports single/dual channel 18/24-bit, resolution up to 1920 x 1200 @ 60 Hz

DDI (HDMI/DVI/DisplayPort): Supports HDMI, DisplayPort, DVI

(DDI2:Optional)

Resolution:

– HDMI up to 4096 x 2304 @24 Hz

– DVI up to 1920 x 1200 @ 60 Hz

– DP up to 3200 x 2000 @ 60 Hz

PCI Express x1: Supports 4 PCIe x1 compliant ports by default.

Expansion:

Audio Interface: Intel HD Audio interface

LPC Bus: Yes (24 MHz)

SMBus: Yes

I2C Bus: up to 1 MB/s

SPI: Supports SPI BIOS only

I/O:

Ethernet: Intel i218LM Gigabit LAN supports 10/100/1000 Mbps Speed

SATA: Supports 4 ports SATA Gen2 (3 Gb/s) and Gen3 (6Gb/s), RAID 0, 1, 5, 10

USB Interface: Supports 2 ports USB3.0, 8 ports USB 2.0

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

Smart Fan: 2 Ports; 1 Port on COM Module. Support 12V Fan, 1 Port on Carrier Board

GPIO: 8-bit GPIO

Power Supply Voltage: ATX (Vin 4.75-20V, Vsb 4.75-5.25V)

TPM: N/A

SOM-6894 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. This product is designed with the latest Intel 4th generation ultra low power processors- Intel® Core™ i7-4650U, i5-4300U, i3-4010U, and Intel® Celeron 2980U which integrates the CPU and PCH onto one single chip. SOM-6894 has 15% CPU performance improvement than previous generation, GT3 graphics, and lower Thermal Design Power (TDP) 15W.

To compare with previous versions, SOM-6894 delivers improved graphics performance with the latest Intel® HD graphics with DX 11.1, OGL 3.2, OCL 1.2 support. It can support dual and triple independent displays for even better media and display capabilities. In addition, SOM-6894 features up to 16GB of DDR3L 1600MHz nonECC un-buffered memory, 4 PCIe x1 (optional for 1 PCIe x4), 1 GLAN, 4 SATA, 2 USB 3.0, 8 USB 2.0, and 8 GPIO functions. Due to the outstanding performance, small form-factor, and rich expansion interfaces, this product is ideal for medical, digital signage, automation and surveillance applications.

Specifications

SOM Type:

COM Express Modules

Processor

Intel® Core™ i7/i5/i3/Celeron® processor

Clock Speed:

1.9 GHz

Real Time Clock:

Processor Misc.:

Embedded 4th Gen. Intel® Core™ i7/i5/i3/Celeron® processor (U-Processor Line):

- Intel® i7-4650U: Dual Core 1.7 GHz/ 15W
- Intel® i5-4300U: Dual Core 1.9 GHz/ 15W
- Intel® i3-4010U: Dual Core 1.7 GHz/ 15W
- Celeron 2980U: Dual Core 1.6 GHz/ 15W

Memory

BIOS/ Bootloader:

AMI uEFI

Primary Flash:

SATA HDD/SSD or DOM

Primary I/O

8x GPIO

Disk Interface:

4x SATA II/III supports RAID 0

1

5

10

Video Out:

VGA

LVDS

HDMI/DisplayPort/DVI

Audio:

HD Audio

Ethernet:

Intel® i218LM Gigabit Ethernet

USB:

2x USB 3.0 & 8x USB 2.0

Serial Ports:

2x COM (2-Wire)

Watchdog:

Secondary I/O

Keypad:

PS/2:

Analog on

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")	
Power Requirements	
Power Misc.:	
Type ATX, AT	
Supply Voltage	
ATX (Vin 4.75-20V, Vsb 4.75-5.25V)	
AT (Vin 4.75-20V)	
Power Consumption (Max.) +12V @ 1.84A (i7-4650U), 1.79A (i5-4300U), 1.8A (i3-4010U), 1.73A (Celeron 2980U)	
Power Consumption (Idle) +12 V @ 0.37A (i7-4650U), 0.35A (i5-4300U), 0.37A (i3-4010U), 0.34A (Celeron 2980U)	
Environmental	
Low Operating Temperature:	
0 C	
High Operating Temperature:	
60 C	
Upper Operating Humidity:	
95%	
Environmental Misc.:	
Optional operating temperature -20 ~ 80° C	
Pricing	
SOM-6894C3-S7	
SOM-6894C3-S7A1E, COMeCT6, i3-4010U 2x1.7GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS	
\$582.00	
Order:	
0	
Base Product:	
SOM-6894	
SOM-6894C3Z-S7	
SOM-6894C3Z-S7A1E, COMeCT6, i3-4010U 2x1.7GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS (-20~80C)	
\$706.00	
Order:	
0	
Base Product:	
SOM-6894	
SOM-6894C5-S9	
SOM-6894C5-S9A1E, COMeCT6, i5-4300U 2x1.97GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS	
\$768.00	
Order:	
0	
Base Product:	
SOM-6894	
SOM-6894C5Z-S9	
SOM-6894C5Z-S9A1E, COMeCT6, i5-4300U 2x1.97GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS (-20~80C)	
\$907.00	
Order:	

0

Base Product:

SOM-6894

SOM-6894C7-S7

SOM-6894C7-S7A1E, COMeCT6, i7-4650U 2x1.7GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS

\$1,040.00

Order:

0

Base Product:

SOM-6894

SOM-6894C7Z-S7

SOM-6894C7Z-S7A1E, COMeCT6, i7-4650U 2x1.7GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS (-20~80C)

\$1,190.00

Order:

0

Base Product:

SOM-6894

SOM-6894CR-S6

SOM-6894CR-S6A1E, COMeCT6, 2980U 2x1.6GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS

\$490.00

Order:

0

Base Product:

SOM-6894

SOM-6894CRZ-S6

SOM-6894CRZ-S6A1E, COMeCT6, 2980U 2x1.6GHz, 4xSATA, 2xCOM, 2xUSB3, 8xUSB2, GbE, VGA, DP, LVDS (-20~80C)

\$593.00

Order:

0

Base Product:

SOM-6894

Non-Stock NCNR:

0

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