

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

SOM-6894

Intel® Core™ i7/i5/i3/Celeron® Processor COM Express® Compact Module



Features

- Embedded Intel® Core™ i7/i5/i3/Celeron® processor (U-Processor Line)
- Supports Dual Channel DDR3L 1600 SODIMM sockets up to 16 GB
- Supports 4 PCIex1, 8 USB 2.0, 2 USB3.0, 4 SATA, 1 GbE
- Supports 3 independent displays: VGA, LVDS, HDMI/DisplayPort/DVI
- Supports iManager, SUSIAccess and Embedded Software APIs

Software APIs: Watchdog, I²C, SMBus, H/W Monitor, GPIO, Brightness Control

Windows Embedded, Linux, iManager, SUSIAccess, CE, FC

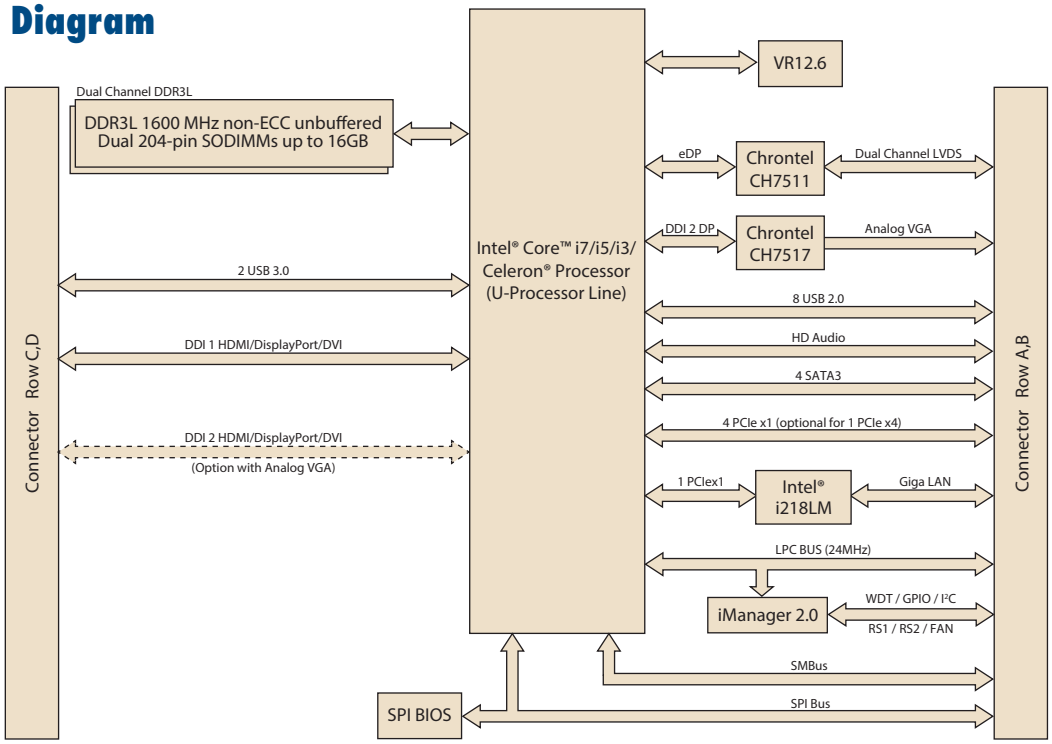
Specifications

Form Factor	Form Factor	COM Express 2.1			
	Pin-out Type	Compact Module, Type 6 Pin-out			
Processor System	CPU + PCH	Intel® 4th Gen. Processor Intel® i7-4650U	Intel® i5-4300U	Intel® i3-4010U	Celeron 2980U
	Base Frequency	1.7GHz	1.9GHz	1.7GHz	1.6GHz
	Intel Turbo Boost Frequency 2.0 Max Single Core Turbo Frequency	3.3GHz	2.9GHz	N/A	N/A
	Core/Thread	2	2	2	2
	LLC	4MB	3MB	3MB	2MB
	CPU TDP	15W	15W	15W	15W
	BIOS	AMI UEFI BIOS @ 128 Mb			
Memory	Technology	DDR3L 1600MHz non-ECC unbuffered			
	Max. Capacity	16GB			
	Socket	Two 204P SODIMMs			
Graphics	Controller	Intel® HD graphics 5000	Intel® HD graphics 4400	Intel® HD Graphics 4400	Intel® HD Graphics
	Max. Frequency	1.1 GHz	1.1 GHz	1 GHz	1 GHz
	Graphic Memory	Intel® DVMT 5.0 support up to 1024MB video memory			
	3D/HW Acceleration	DX 11.1, OGL 3.2, OCL 1.2 support			
Display	VGA	1920 x 1200			
	LCD (TTL/LVDS/eDP)	Single and dual channel 18/24-bit LVDS			
	DDI (HDMI/DVI/DisplayPort)	DDI 1: support HDMI, DisplayPort, DVI (DDI 2: Optional)			
	Dual Display	VGA, LVDS (Default)			
	Triple Display	VGA, LVDS, HDMI/DisplayPort/DVI			
Expansion	PCI Express x1	4 PCIe x1 (optional for 1 PCIe x4)			
	Audio Interface	HD Audio			
	LPC	Yes (24MHz)			
Serial Bus	SMBus	Yes			
	I²C Bus	Yes			
Ethernet	Controller	Intel® i218LM			
	Speed	10/100/1000 Mbps			
I/O	SATA	4 Ports, Support Gen2 (3 Gb/s) and Gen3 (6Gb/s), RAID 0, 1, 5, 10			
	USB3.0	2 Ports			
	USB2.0	8 Ports			
	GPIO	8-bit GPIO			
	Watchdog	65536 level, 0 ~ 65535 sec			
	COM Port	2 Ports (2-Wire)			
	Smart Fan	2 Ports; 1 Port on COM Module. Support 12V Fan, 1 Port on Carrier Board			
Power	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)			
Environment	Temperature	Operating: 0 ~ 60° C (32 ~ 140° F) Storage: -20 ~ 80° C (-4 ~ 176° F)			
	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing Storage: 60° C @ 95%relative humidity, non-condensing			
	Vibration Resistance	3.5 Grms			
Mechanical	Dimensions	95 x 95 mm (3.74" x 3.74")			

All product specifications are subject to change without notice

Last updated : 15-May-2015

Block Diagram



Ordering Information

Part No.	CPU + PCH	Frq.	CPU TDP	LLC	DDR3L Memory	LVDS	VGA	DDI	Giga LAN	HDA	PCIE x1	USB 2.0	USB 3.0	SATA III	LPC	Power	Thermal Solution	Operating Temperature
SOM-6894C7-S7A1E	Intel® i7-4650U	1.7GHz	15W	4M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	0 ~ 60° C
SOM-6894C5-S9A1E	Intel® i5-4300U	1.9GHz	15W	3M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	0 ~ 60° C
SOM-6894C3-S7A1E	Intel® i3-4010U	1.7GHz	15W	3M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	0 ~ 60° C
SOM-6894CR-S6A1E	Celeron 2980U	1.6GHz	15W	2M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	0 ~ 60° C
SOM-6894C7Z-S7A1E	Intel® i7-4650U	1.7GHz	15W	4M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-6894C5Z-S9A1E	Intel® i5-4300U	1.9GHz	15W	3M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-6894C3Z-S7A1E	Intel® i3-4010U	1.7GHz	15W	3M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-6894CRZ-S6A1E	Celeron 2980U	1.6GHz	15W	2M	Non-ECC	18/24 bit	Yes	2*	1	Yes	4	8	2	4	Yes	AT/ATX	Active	-20 ~ 80° C

*-DDI2 is optional

Note: Passive = fanless; Active = with fan

Development Board

Part No.	Description
SOM-DB5800-00A2E	COM Express Development Board A2 Type 6 Pin-out

Packing List

Part No.	Description	Quantity
-	SOM-6894 CPU Module	1
1960062204N001	Heatspreader	1

Optional Accessories

Part No.	Description
1960048819N001	Semi-Cooler 95 x 95 x 33.5 mm with 12V fan
96LEDK-I057VG50NA1	5.7" LED PANEL 500N 640X480(G)
96LEDK-A084SV45NB2	8.4" LED PANEL 450N 800X600(G) G084SN05 V9
96LEDK-C150XG40NG1	15" LED PANEL 400N 1024X768(G) G150XGE-L04
96LEDK-A170SX35NF1	17" LED 350N 1280X1024(G) G170EG01 V1

Embedded OS

OS	Part No.	Description
WES7 (32bit)	2070012296	img WES7P SOM-6894 V5.1.4 x86 Eng
WES7 (64bit)	2070012484	img SOM-6894 WES7P x64 V5.6.4 Eng
WE8S (32bit)	2070012249	img WE8S SOM-6894 x86 V6.0.0 Eng
WE8S (64bit)	2070012423	img WE8S SOM-6894 x64 V6.5.0 Eng
Linux	2070012218	Linux Ubuntu13.04

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP