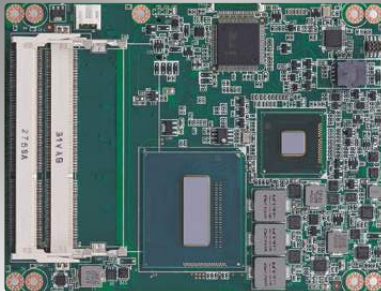


SOM-5894

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

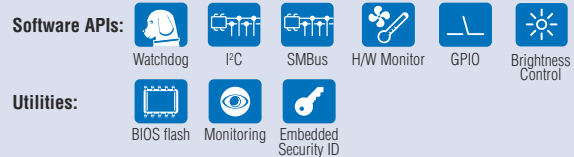
Preliminary



iManager susiAccess CE FCC

Features

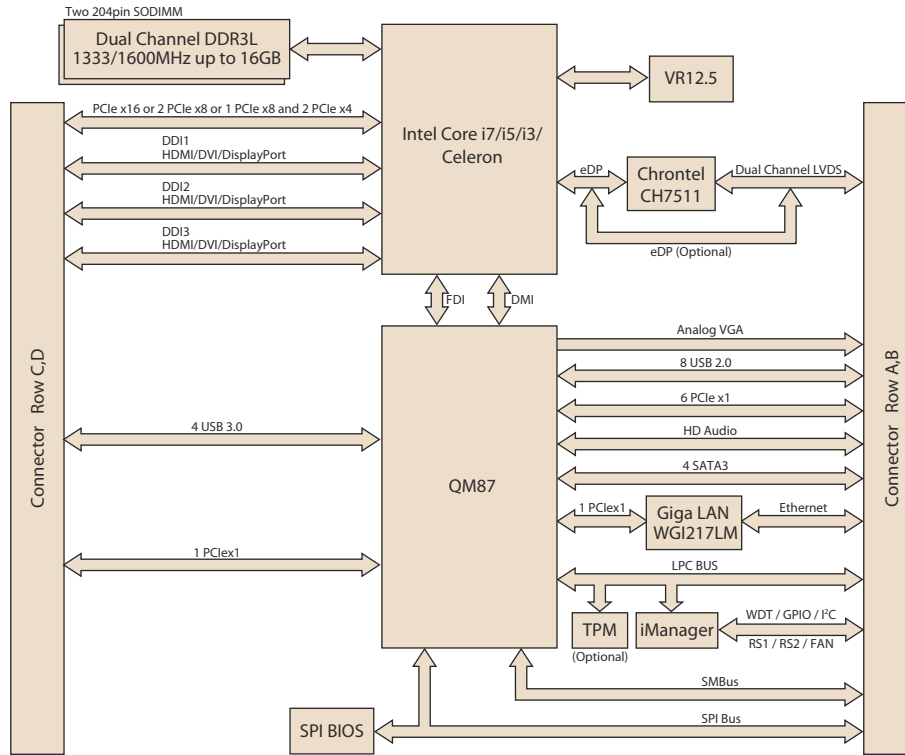
- Embedded Intel® Core™ i7/i5/i3/Celeron® processor + Lynx Point-M
- Supports Dual Channel DDR3L-1333/1600 SODIMM sockets up to 16 GB
- Supports PCIe x16, 7 PCIe x1, 4 SATAIII, 8 USB 2.0, 4 USB 3.0, GbE
- Supports 3 independent displays: VGA, LVDS, DVI, HDMI, DisplayPort
- Supports iManager, SUSIAccess and Embedded Software APIs



Specifications

Form Factor	COM-Express 2.1 Basic Module, Type 6 Pin-out	
Processor System	CPU	Intel Core i7-4700EQ Processor (4C, 6M Cache, 2.4GHz)
	System Chipset	Intel QM87
	BIOS	AMI UEFI BIOS @ 128 Mbit
Memory	Memory Technology	DDR3L 1333/1600 MHz
	ECC Support	-
	Max Capacity	16 GB
	Socket	Two 204-pin SODIMM sockets
Display	Graphics	Intel Gfx Engine
	LVDS	Single and dual channel 18/24-bit LVDS
	VGA	1920 x 1200
	DDI	3 ports support HDMI, DVI, DisplayPort
Multi-Displays	3 independent displays: VGA, LVDS, DVI, HDMI, DisplayPort	
Ethernet	Chipset	i217LM
	Speed	10/100/1000 Mbps
WatchDog Timer	65536 level, 0 ~ 65535 sec	
Expansion	PCIe x16, 7 PCIe x1	
I/O	PATA	-
	SATA	4 SATAIII
	USB	8 USB 2.0 4 USB 3.0
	Audio	HD Audio
	GPIO	8-bit
	COM	2 Ports
	TPM	Optional
Power	Power Type	ATX, AT
	Power Supply Voltage	ATX (Vin 8.5-20V, Vsb 4.75-5.25V) AT (Vin 8.5-20V)
	Power Consumption (Typical)	(8G DDR3L 1600) i7-4700EQ (Engineering Sample): +12V @ 0.71A
	Power Consumption (Max, tested in HCT)	(8G DDR3L 1600) i7-4700EQ (Engineering Sample): +12V @ 3.51A
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Operating Humidity	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimensions	125 x 95 mm (4.92" x 3.74")

Block Diagram



Ordering Information

Part No.	CPU	Frq.	CPU TDP	LLC	PCH	DDR3L Memory	LVDS	VGA	DDI	Giga LAN	HAD	PEG x16	PCIe x1	USB2.0	USB3.0	SATA III	LPC	Power	Thermal Solution	Operating Temperature
SOM-5894FG-U4A1E	Core i7-4700EQ	2.4 GHz	47W	6 MB	QM87	Non-ECC	18/24 bit	Yes	3	1	Yes	1	7	8	4	4	Yes	AT/ATX	Active	0 - 60° C

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-5894 CPU Module	1
1960058957N001	Heatspreader	1

Optional Accessories

Part No.	Description
1960048820N001	Semi-Cooler 125x95x33.5mm with 12V Fan
96LEDK-I057VG50NA1	5.7" LED PANEL 500N 640x480(G) AM-640480G2TNQW-AOH
96LEDK-A084SV45NB2	8.4" LED PANEL 450N 800 x 600(G) G084SN05 V9
96LEDK-C150XG40NG1	15" LED PANEL 400N 1024 x 768(G) G150XGE-L04
96LEDK-A170SX35NF1	17" LED PANEL 350N 1280x1024(G) G170EG01 V1