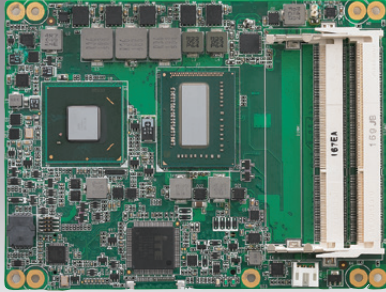


# SOM-5892

## 3rd Gen. Intel® Core™ Processor COM Express® Basic Module



### Features

- Embedded Intel® Core™ i7/i5/i3/Celeron® processor + QM77
- Supports Dual Channel DDR3-1600, DDR3L-1333 SODIMM sockets up to 16 GB
- Supports PCIe x16, 7 PCIe x1, 2 SATAIII, 2 SATAII, 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

#### Software APIs:



Watchdog



PC



SMBus



H/W Monitor



GPIO



Brightness Control

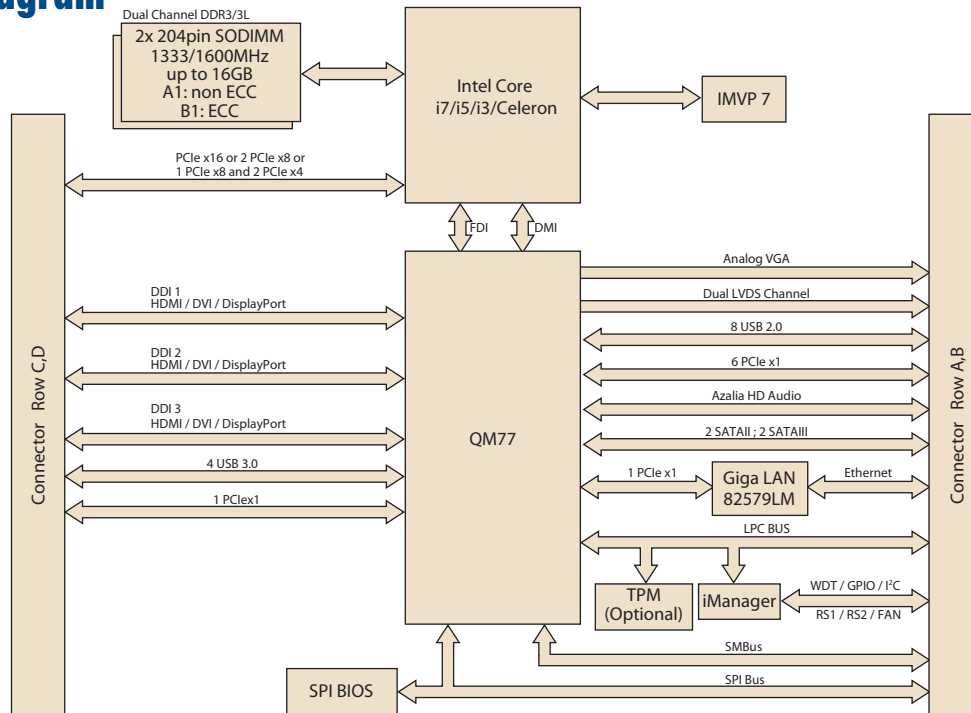


iManager susiAccess CE FCC

### Specifications

Form Factor	COM Express 2.0 Basic Module, Type 6 Pin-out		
Processor System	CPU	Intel Core i7-3615QE Processor (4C, 6M Cache, 2.3 GHz) Intel Core i7-3612QE Processor (4C, 6M Cache, 2.1 GHz) Intel Core i7-3555LE Processor (2C, 4M Cache, 2.5 GHz) Intel Core i7-3517UE Processor (2C, 4M Cache, 1.7 GHz) Intel Core i5-3610ME Processor (2C, 3M Cache, 2.7 GHz) Intel Core i3-3120ME Processor (2C, 3M Cache, 2.4 GHz) Intel Core i3-3217UE Processor (2C, 3M Cache, 1.6 GHz) Intel Celeron 1020E Processor (2C, 2M Cache, 2.2 GHz) Intel Celeron 1047UE Processor (2C, 2M Cache, 1.4 GHz) Intel Celeron 927UE Processor (1C, 1M Cache, 1.5 GHz)	
	System Chipset	Intel QM77	
	BIOS	AMI EFI 64Mb	
Memory	Memory Technology	DDR3 1333/1600 MHz, DDR3L 1333 MHz	
	ECC Support	A1 Series: not supported, B1 Series: supported	
	Max Capacity	16 GB	
	Socket	2 x 204-pin SODIMM sockets	
Display	Graphics	Intel Gfx Engine	
	LCD	Single and dual channel 18/24-bit LVDS	
	VGA	2048 x 1536	
	DDI	3 ports support HDMI, DVI, DisplayPort	
Ethernet	Multi-Displays	3 independent displays: VGA, LVDS, DVI, HDMI, DisplayPort	
	Chipset	82579LM	
WatchDog Timer	Speed	10/100/1000 Mbps	
		65536 level, 0 ~ 65535 sec	
Expansion		PEG x16, 7 PCIe x1	
	SATA		2 SATAIII 2 SATAII
		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 (12 V, 5 Vsb) AT (12 V)	
Power Consumption (Max.)		i7-3615QE w/ DDR3 16 GB: 41.8 W @ 12 V	
Power Consumption (Idle)		i7-3616QE w/ DDR3 16 GB: 5.4 W @ 12 V	
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)	
Operating Humidity	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing	
		Storage: 60° C @ 95% relative humidity, non-condensing	
Mechanical	Dimensions	125 x 95 mm (4.92" x 3.74")	

## Block Diagram



## Ordering Information

Part No.	CPU	CPU TDP	LLC	PCH	DDR3 SODIMM	LVDS	VGA	DDI	Giga LAN	HDA	PEG x16	PCIe x1	USB 2.0	USB 3.0	SATA	LPC	Power	Thermal Solution	Operating Temp.
SOM-5892FG-U3A1E	Core™ i7-3615QE 2.3 GHz	45W	6 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U1A1E	Core™ i7-3612QE 2.1 GHz	35W	6 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U5A1E	Core™ i7-3555LE 2.5 GHz	25W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-S7A1E	Core™ i7-3517UE 1.7 GHz	17W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U7A1E	Core™ i5-3610ME 2.7 GHz	35W	3 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U4A1E	Core™ i3-3120ME 2.4 GHz	35W	3 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-S6A1E	Core™ i3-3217UE 1.6 GHz	17W	3 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U2A1E	Celeron® 1020E 2.2 GHz	35W	2 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-S4A1E	Celeron® 1047UE 1.4 GHz	17W	2 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-S5A1E	Celeron® 927UE 1.5 GHz	17W	1 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892Z-U5A1E	Core™ i7-3555LE 2.5 GHz	25W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-5892Z-U5A1E	Core™ i7-3555LE 2.5 GHz	25W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-40 ~ 85° C
SOM-5892Z-S7A1E	Core™ i7-3517UE 1.7 GHz	17W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-5892Z-S7A1E	Core™ i7-3517UE 1.7 GHz	17W	4 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-40 ~ 85° C
SOM-5892Z-S6A1E	Core™ i3-3217UE 1.6 GHz	17W	3 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-5892Z-S6A1E	Core™ i3-3217UE 1.6 GHz	17W	3 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-40 ~ 85° C
SOM-5892Z-S4A1E	Celeron® 1047UE 1.4 GHz	17W	2 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-20 ~ 80° C
SOM-5892Z-S4A1E	Celeron® 1047UE 1.4 GHz	17W	2 MB	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	-40 ~ 85° C
SOM-5892FG-U3B1E	Core™ i7-3615QE 2.3 GHz	45W	6 MB	QM77	ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-U7B1E	Core™ i5-3610ME 2.7 GHz	35W	3 MB	QM77	ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	Yes	AT/ATX	Active	0 ~ 60° C
SOM-5892FG-S6B1E	Core™ i3-3217UE 1.6 GHz	17W	3 MB	QM77	ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	4 SATA	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

## Optional Accessories

Part No.	Description
1960048820N001	Semi-Cooler 125x95x33.5mm with 12V Fan

## Packing List

Part No.	Description	Quantity
-	SOM-5892 CPU Module	1
1960052353N011	Heatspreader	1