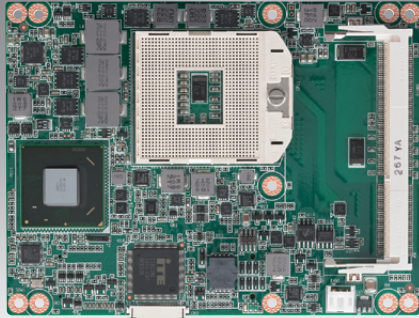


# SOM-9890

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

**NEW**



iManager susiAccess CE FCC

### Features

- Supports socket CPU (FCPGA988) for Intel® 3rd Generation Intel® Core™ processors i7/i5/i3/Celeron® processor + QM77
- Supports Dual Channel DDR3-1600, DDR3L-1333 SODIMM 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

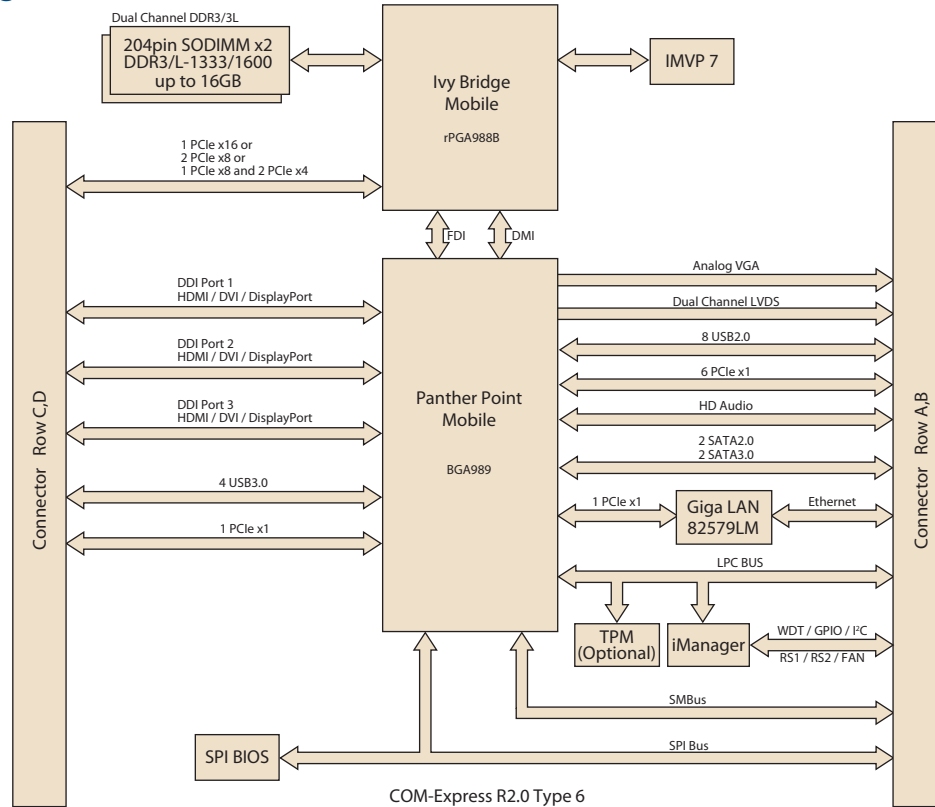


Brightness Control

### Specifications

Form Factor		COM Express 2.0 Basic Module, Type 6 Pin-out
Processor System (FCPGA988)	CPU	Intel Core i7-3610QE Processor (4C, 6M Cache, 2.3 GHz) 45 W Intel Core i5-3610ME Processor (2C, 3M Cache, 2.7 GHz) 35 W Intel Core i3-3120ME Processor (2C, 3M Cache, 2.4 GHz) 35 W
	System Chipset	Intel QM77
	BIOS	AMI EFI 64Mb
Memory	Memory Technology	DDR3 1333/1600 MHz, DDR3L 1333 MHz
	ECC Support	No
	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
	Multi-Displays	3 independent displays: VGA, LVDS, DVI, HDMI, DisplayPort
Ethernet	Chipset	82579LM
	Speed	10/100/1000 Mbps
WatchDog Timer		65536 level, 0 ~ 65535 sec
Expansion		PCIe x16, 7 PCIe x1
I/O	PATA	-
	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
	Power Supply Voltage	ATX (12 V, 5 Vsb) AT (12 V)
	Power Consumption (Typical)	TBD
	Power Consumption (Max, tested in HCT)	TBD
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-9890FG-00A1E	-	-	-	QM77	non-ECC	18/24-bit	Yes	3	1	Yes	1	7	8	4	2 SATA III 2 SATA II	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-9890 CPU module	1
1960058990N001	Heatspreader	1