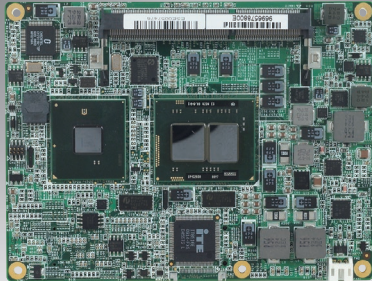


# SOM-5788

## Intel® Core™ Processor COM Express® Basic Module



### Features

- Embedded Intel® Core™ i7/i5/i3/Celeron® processor + QM57
- Intel® GMA supports single and dual channel 18/24-bit LVDS, HDMI, Displayport, VGA
- Supports 2 DDR3-1066 memory SODIMM sockets up to 8 GB
- Supports 6 PCIe x1, 4 PCI masters, 4 SATAII, 8 USB 2.0, EIDE, GbE
- Supports iManager, SUSIAccess and Embedded Software APIs

#### Software APIs:

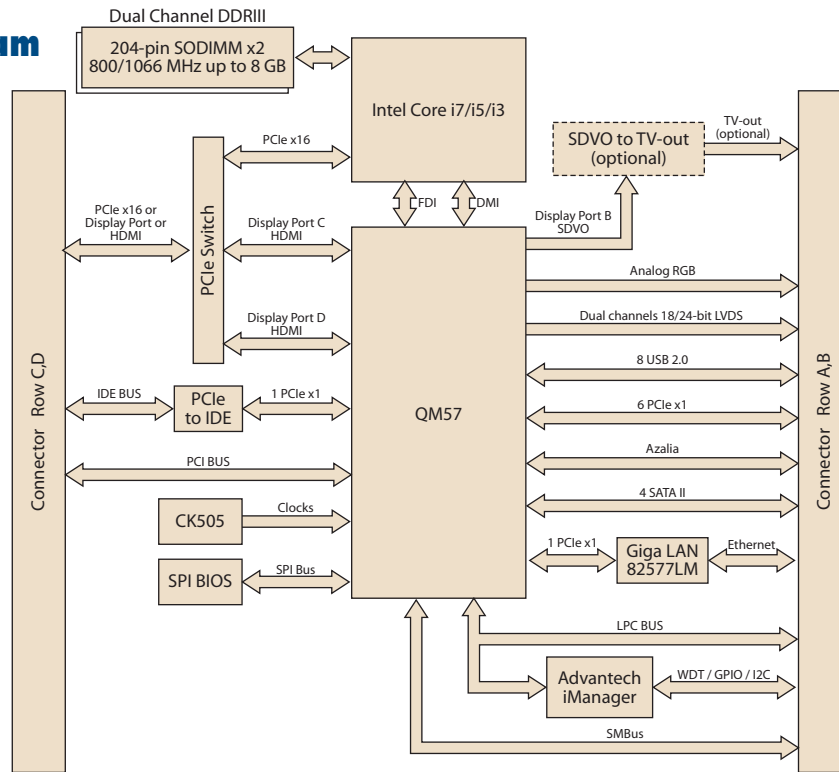


iManager susiAccess CE FCC

### Specifications

Form Factor		COM Express Basic Module, Type II Pin-out		
Processor System	CPU	Intel Core i7-610E Processor (4M Cache, 2.53 GHz) Intel Core i7-620LE Processor (4M Cache, 2.00 GHz) Intel Core i7-620UE Processor (4M Cache, 1.06 GHz) Intel Core i5-520E Processor (3M Cache, 2.40 GHz) Intel Core i3-330E Processor (3M Cache, 2.13 GHz) Intel Core i7-660UE Processor (4M Cache, 1.33 GHz) Intel Celeron P4505 Processor (2M Cache, 1.86 GHz) Intel Celeron U3405 Processor (2M Cache, 1.06 GHz)		
	System Chipset	Intel QM57		
	BIOS	AMI EFI 64Mb		
Memory	Technology	DDR3 800/1066 MHz		
	ECC Support	A1 Series - not supported, B1 Series - supported		
	Max. Capacity	up to 8 GB		
Display	Socket	Dual 204-pin SODIMM sockets		
	Chipset	Intel GMA integrated in Core i7, Core i5, or Core i3		
	LVDS	Single and dual channel 18/24-bit LVDS		
	VGA	Up to 2048 x 1536		
	DDI	2 DDI Ports support configurable HDMI/DVI/DisplayPort		
Ethernet	TV-out	Optional		
	Chipset	Intel 82577LM Intel HD Audio Ethernet		
WatchDog Timer	Speed	10/100/1000 Mbps		
Expansion		65536 level timer interval, from 0-65535 sec, multi-level, multi-option watchdog timer		
I/O		LPC, 6 PCIe x 1 and 1 PEG x 16, 4 PCI masters		
	PATA	1 EIDE (UDMA 100)		
	SATA	4 SATAII (300 MB/s)		
	USB	8 USB 2.0		
	Audio	High definition audio interface		
	GPIO	8-bit GPIO		
Power	Power Type	ATX, AT		
	Power Supply Voltage	+12 V and +5 VSB for ATX, +12V for AT		
	Power Consumption (Max: Burn-in Test)		+12 V @ 3.56 A (610E) +12 V @ 2.89 A (620LE) +12 V @ 2.34 A (660UE) +12 V @ 1.95 A (620UE) +12 V @ 3.27 A (520E) +12 V @ 2.83 A (330E)	
			+12 V @ 2.5 A (P4505)	
			+12 V @ 1.46 A (U3405)	
		Power Consumption (Min: OS idle)		+12 V @ 0.66 A (610E) +12 V @ 0.73 A (620LE) +12 V @ 0.64 A (660UE) +12 V @ 0.76 A (620UE)
				+12 V @ 0.87 A (520E) +12 V @ 0.89 A (330E)
				+12 V @ 1.34 A (P4505)
			+12 V @ 0.64 A (U3405)	
	Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)	
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	LLC	Chipset	DD3 SODIMM	LVDS	VGA	TV-out	Giga LAN	HD Audio	PCIe x4	PCIe x1	PCI	USB 2.0	SATA II	LPC	SMBus	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-5788FG-USA1E	Core i7-610E SV 2.53 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-UOA1E	Core i7-620LE LV 2.0 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-S1A1E	Core i7-620UE ULV 1.06 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-U4A1E	Core i5-520E SV 2.4 GHz	3 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-U1A1E	Core i3-330E SV 2.13 GHz	3 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-S9A1E	Celeron P4505 SV 1.86 GHz	2 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-S0A1E	Celeron U3405 ULV 1.07 GHz	2 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-S3A1E	Core i7-660UE ULV 1.33 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788Z-S1A1E	Core i7-620UE ULV 1.06 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-20 - 80° C
SOM-5788Z-S1A1E	Core i7-620UE ULV 1.06 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-40 - 85° C
SOM-5788Z-U0A1E	Core i7-620LE LV 2.0 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-20 - 80° C
SOM-5788Z-U0A1E	Core i7-620LE LV 2.0 GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-40 - 85° C
SOM-5788Z-S0A1E	Celeron U3405 1.07GHz	2 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-20 - 80° C
SOM-5788Z-S0A1E	Celeron U3405 1.07GHz	2 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-40 - 85° C
SOM-5788Z-S3A1E	Core i7-660UE 1.33GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-20 - 80° C
SOM-5788Z-S3A1E	Core i7-660UE 1.33GHz	4 MB	QM57	Non-ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	-40 - 85° C
SOM-5788FG-USB1E	Core i7-610E SV 2.53 GHz	4 MB	QM57	ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-S1B1E	Core i7-620UE ULV 1.06 GHz	4 MB	QM57	ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C
SOM-5788FG-U4B1E	Core i5-520E SV 2.4 GHz	3 MB	QM57	ECC	18/24-bit	Yes	option	1	Yes	Option	6	4	8	4	1	1	Yes	Yes	Active	0 - 60° C

Note: Passive = fanless; Active = with fan

## Development Board

Part No.	Description
SOM-DB5720-00A1E	Development Board for COM Express Type2

## Optional Accessories

Part No.	Description
1960048820N001	Semi-Cooler 125 x 95 x 33.5 mm with 12 V Fan

## Packing List

Part No.	Description	Quantity
-	SOM-5788 CPU Module	1
-	Utility CD	1
1960047959T001	Heatspreader	1