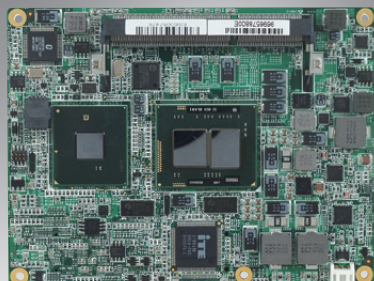


SOM-5788

Intel® Core™ Processor COM Express® Basic Module



iManager susiAccess CE FCC

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:



Watchdog



PC



SMBus



H/W Monitor

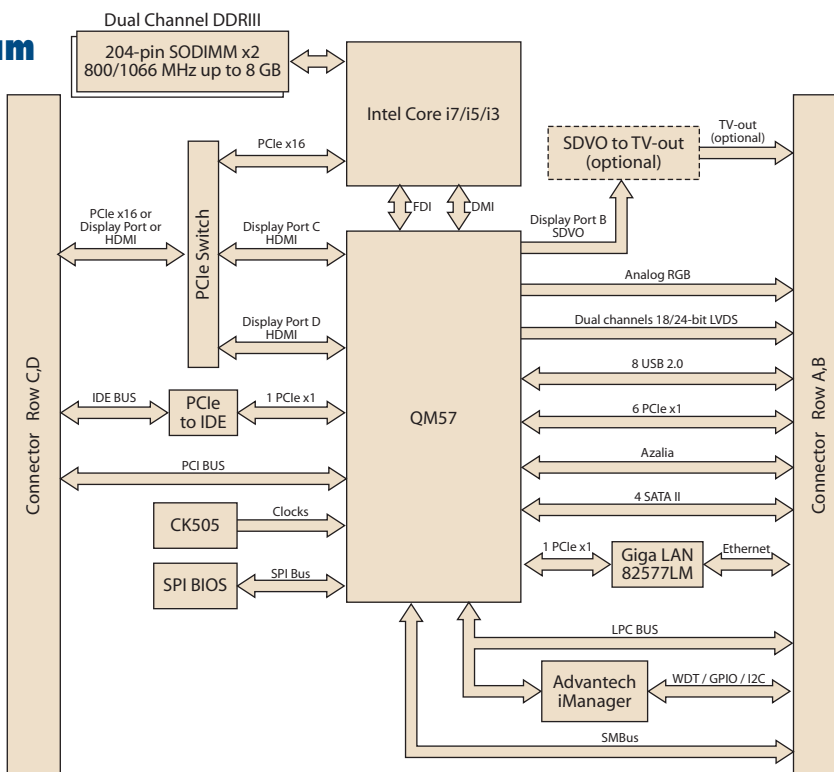


GPIO

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)
Memory	System Chipset	Intel QM57
	BIOS	AMI EFI 64Mb
	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
Power	GPIO	8-bit GPIO
	Power Type	ATX, AT
	Power Supply Voltage	+12 V and +5 VSB for ATX, +12V for AT
	Power Consumption (Max.)	TBD
Environment	Power Consumption (Idle)	TBD
	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
Mechanical	Humidity	Operating: 40° C @ 95% relative humidity, non-condensing Storage: 60° C @ 95% relative humidity, non-condensing
	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-U5A1E	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-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	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-U5B1E	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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Advantech:

[SOM-5788FG-S1A1E](#) [SOM-5788FG-S1B1E](#) [SOM-5788FG-S3A1E](#) [SOM-5788FG-U1A1E](#) [SOM-5788FG-U4B1E](#)
[SOM-5788FG-U5A1E](#) [SOM-5788FG-U5B1E](#) [SOM-5788Z2-S0A1E](#) [SOM-5788Z2-S1A1E](#) [SOM-5788Z2-S3A1E](#) [SOM-](#)
[5788Z-S0A1E](#) [SOM-5788Z-S3A1E](#) [SOM-5788FG-S0A1E](#) [SOM-5788FG-S9A1E](#) [SOM-5788FG-U0A1E](#) [SOM-](#)
[5788FG-U4A1E](#) [SOM-5788Z2-U0A1E](#) [SOM-5788Z-S1A1E](#) [SOM-5788Z-U0A1E](#)