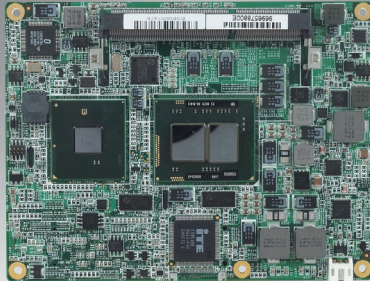


SOM-5788

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

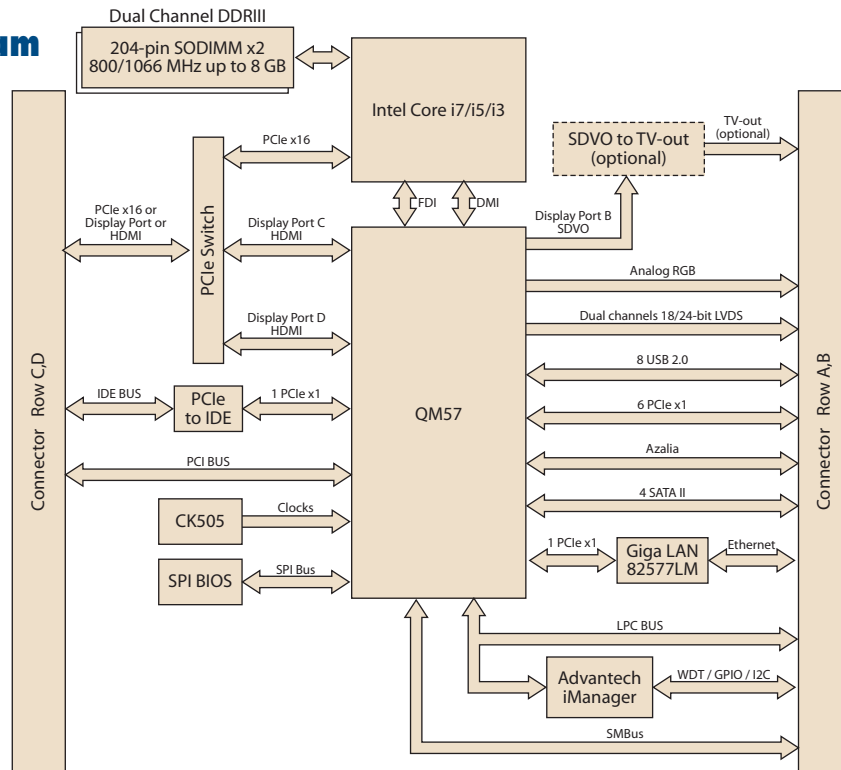
Software APIs:



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)
Memory	System Chipset	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)
Display	System Chipset	Intel QM57
		BIOS
		AMI EFI 64Mb
		Technology
Ethernet	Memory	DDR3 800/1066 MHz
		ECC Support
		A1 Series - not supported, B1 Series - supported
		Max. Capacity
WatchDog Timer	Socket	up to 8 GB
		Chipset
		Intel GMA integrated in Core i7, Core i5, or Core i3
		LVDS
Expansion	Display	Single and dual channel 18/24-bit LVDS
		VGA
		Up to 2048 x 1536
		DDI
I/O	Ethernet	2 DDI Ports support configurable HDMI/DVI/DisplayPort
		TV-out
		Optional
		Chipset
Power	Power	Intel 82577LM Intel HD Audio Ethernet
		Speed
		10/100/1000 Mbps
		WatchDog Timer
Environment	Expansion	65536 level timer interval, from 0-65535 sec, multi-level, multi-option watchdog timer
		PATA
		1 EIDE (UDMA 100)
		SATA
Mechanical	I/O	4 SATAII (300 MB/s)
		USB
		8 USB 2.0
		Audio
	Power	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	Power Consumption (Max: Burn-in Test)
		+12 V @ 3.56 A (610E)
		+12 V @ 2.89 A (620LE)
		+12 V @ 2.34 A (660UE)
	Power	Power Consumption (Min: OS idle)
		+12 V @ 1.95 A (620UE)
		+12 V @ 3.27 A (520E)
		+12 V @ 2.83 A (330E)
	Power	Power Consumption (Min: OS idle)
		+12 V @ 2.5 A (P4505)
		+12 V @ 1.46 A (U3405)
		+12 V @ 0.66 A (610E)
	Power	Power Consumption (Min: OS idle)
		+12 V @ 0.73 A (620LE)
		+12 V @ 0.64 A (660UE)
		+12 V @ 0.76 A (620UE)
	Power	Power Consumption (Min: OS idle)
		+12 V @ 0.87 A (520E)
		+12 V @ 0.89 A (330E)
		+12 V @ 1.34 A (P4505)
	Power	Power Consumption (Min: OS idle)
		+12 V @ 0.64 A (U3405)
		Operating Temperature
		0 ~ 60° C (32 ~ 140° F)
	Power	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-5788Z2-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-5788Z2-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-5788Z2-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-5788Z2-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