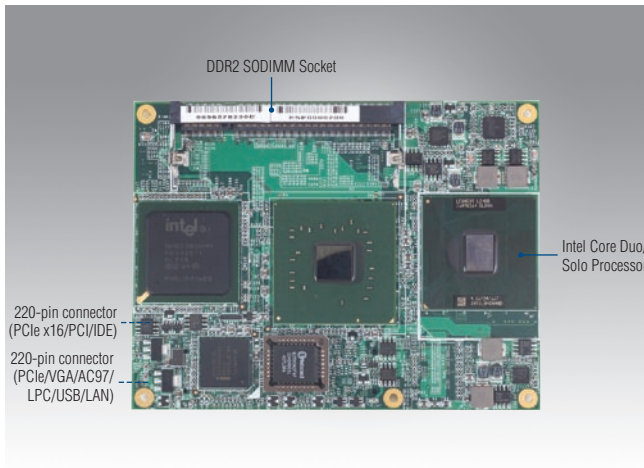


# SOM-5782

## Intel® Core™ 2 Duo, 945GME COM-Express CPU Module



### Features

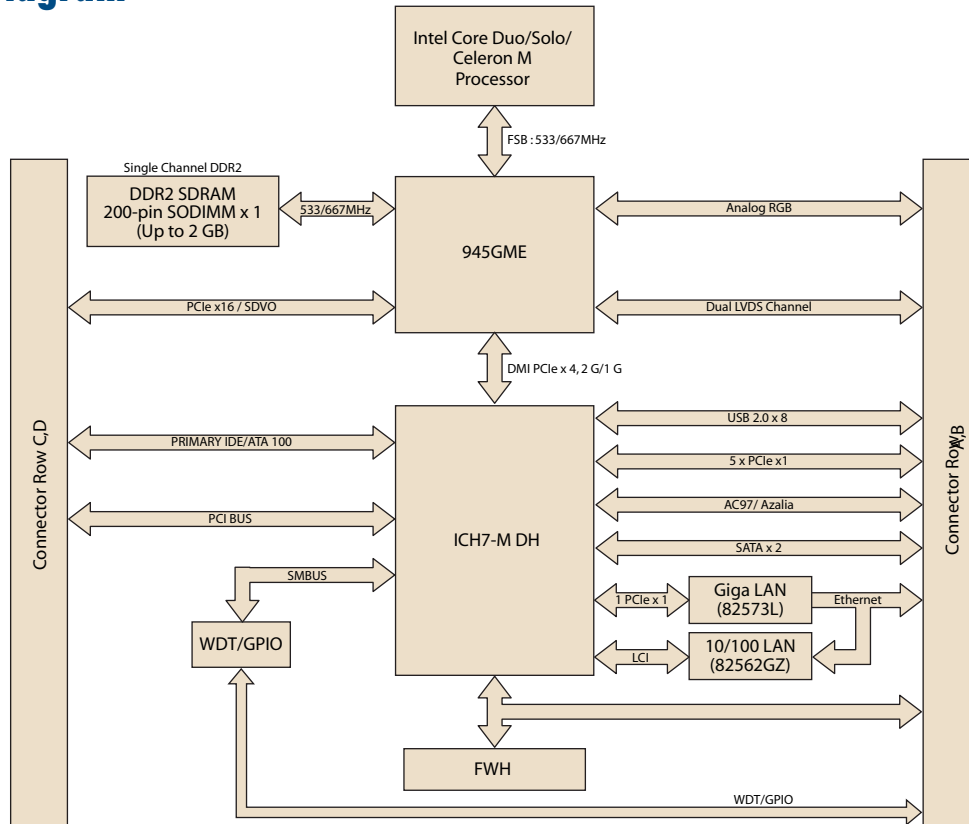
- Embedded Intel® Core™ 2 Duo/Celeron® M processor
- Intel 945GME/ICH7-M DH Chipsets
- Supports one DDR2 SODIMM up to 2 GB
- Mobile Intel GMA 950 3D/2D engine
- Display type: 2 x 18-bit LVDS/ VGA/ 2 SDVO or PCIe x16
- Intel 10/100 or 10/100/1000 Mbps LAN
- Expansion: 5 PCIe x1, 4 PCI master, LPC
- 8 x USB 2.0, 2 SATA, 1 EIDE, 8-bit GPIO



### Specifications

Form Factor		COM-Express, Module Pin-out Type II
Processor System	CPU	Intel Core 2 Duo/Celeron M processor
	Front Side Bus	533/667 MHz
	System Chipset	Intel 945GME/ICH7-M DH
	BIOS	AWARD 4 Mbit Flash BIOS
Memory	Technology	DDR2 533/667 MHz
	Max. Capacity	up to 2 GB
	Socket	1 x 200-pin SODIMM sockets
Display	Chipset	Intel 945GME
	VRAM	DVMT 3.0 supports up to 224 MB
	Graphics Engine	Mobile Intel GMA 950 3D/2D engine
	LCD	2 x 18-bit LVDS
	VGA	up to 2048 x 1536
	TV Out	0 ~ 60° C (32 ~ 140° F)
	SDVO	2 SDVO ports
Dual Display	CRT + LCD (Note: SDVO function is supported by customized BIOS)	
Ethernet	Chipset	Intel 82562GZ 10/100 M or 82573L Gigabit Ethernet
	Speed	10/100 or 10/100/1000 Mbps
WatchDog Timer		256 timer intervals, from 0 to 255 sec or min setup by software, jumperless selection, generates system reset
Expansion		LPC, PCIe x16, 5 PCIe x1, 4 PCI master
I/O	PATA	1 x EIDE (UDMA 100)
	SATA	2 x SATA
	USB	8 x USB 2.0
	Audio	AC97/ 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 Typical: (1 GB DDR2 667)
	Power Consumption (Typical)	+12 V @ 1.58 A (Intel Core Duo T2500) +12 V @ 1.13 A (Intel Core Duo LV L2400) +12 V @ 1.03 A (Intel Celeron M 423) Max: (1 GB DDR2 667)
	Power Consumption (Max, test in HCT)	+12 V @ 2.10 A (Intel Core Duo T2500) +12 V @ 1.58 A (Intel Core Duo LV L2400) +12 V @ 1.26 A (Intel Celeron M 423)
Environment	Operating Temperature	0 ~ 60° C (32 ~ 140° F)
	Operating Humidity	0% ~ 90% relative humidity, non-condensing
Mechanical	Dimensions	125 x 95 mm (4.92" x 3.74")

## Board Diagram



## Ordering Information

Part No.	CPU	L2 Cache	Chipset	LVDS	VGA	SDVO	TV out	Giga LAN	10/100 LAN	HD Audio	AC97 Audio	PCIe x 16	PCIe x 1	PCI	USB 2.0	SATA	LPC	SMBUS	ATX Power	AT Power	Thermal Solution	Operating Temp.
SOM-5782FL-00A1E	Socket		945GME	2 x 18-bit	Yes	2	Yes	--	1	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Active	0 ~ 60° C
SOM-5782FL-S0A1E	Celeron M 423	1 MB	945GME	2 x 18-bit	Yes	2	Yes	--	1	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Passive	0 ~ 60° C
SOM-5782FL-S7A1E	Core Duo L2400	2 MB	945GME	2 x 18-bit	Yes	2	Yes	--	1	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Active	0 ~ 60° C
SOM-5782FG-00A1E	Socket		945GME	2 x 18-bit	Yes	2	Yes	1	--	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Active	0 ~ 60° C
SOM-5782FG-S0A1E	Celeron M 423	1 MB	945GME	2 x 18-bit	Yes	2	Yes	1	--	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Passive	0 ~ 60° C
SOM-5782FG-S7A1E	Core Duo L2400	2 MB	945GME	2 x 18-bit	Yes	2	Yes	1	--	Yes	Yes	1	5	4	8	2	Yes	Yes	Yes	Yes	Active	0 ~ 60° C

## Development Board

Part No.	Description
SOM-DB5700-00A2E	Development Board for 10/100Mbps LAN COM Module
SOM-DB5700G-00A2E	Development Board for Giga LAN COM Module

## Optional Accessories

Part No.	Description
1960023996N00B	Semi-Heatsink 95 x 125 x 22 mm
1960019182T00B	Semi-Cooler 95 x 125 x 22 mm with 12 V Fan

## Packing List

Part No.	Description	Quantity
	SOM-5782 CPU Module	1
	Utility CD	1
1960005316	Heatspreader (SOM-5782FL-00A1E, SOM-5782FG-00A1E, SOM-5782FL-U0A1E)	1
1960005315	Heatspreader (SOM-5782FL-S0A1E, SOM-5782FG-S0A1E, SOM-5782FL-S7A1E, SOM-5782FG-S7A1E)	1