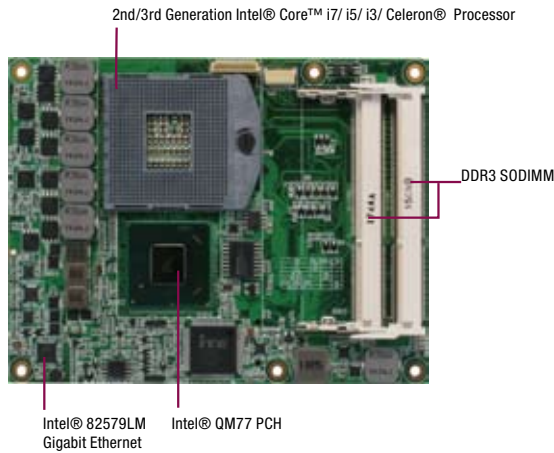


COM-QM77 Rev.A

COM Express Type 6 CPU Module with Intel® Core™ i7/i5/i3/Celeron® Processor (Socket G2)



Features

- 2nd/3rd Generation Intel® Core™ i7/ i5/ i3/ Celeron® Processor (Socket-G2 Based)
- 2nd Generation Intel® QM77 PCH
- Dual-channel SODIMM DDR3 1333/1600 Memory, Max. 16GB
- Gigabit Ethernet (iAMT 8.0 Support)
- CRT, Up to 24-bit Dual-channel LVDS LCD, DisplayPort™, HDMI, DVI, SDVO
- SATA 6.0Gb/s x 2 + SATA 3.0Gb/s x 2
- USB3.0 x 4, USB2.0 x 8
- PCI-Express [x16] x 1, PCI-Express [x1] x 7
- COM Express Basic Module, Pin-out Type 6, COM.0 Rev. 2.0

Specifications

System	
Form Factor	COM Express Basic module, Pin-out Type 6, COM. 0 Rev. 2.0
Processor	2nd/3rd Generation Intel® Core™ i7/i5/i3/Celeron® processor (Socket G2 base)
System Memory	204-pin DDR3 SODIMM x 2, Max. 16GB (DDR3 1333/1600), support dual-channel function
Chipset	2nd Generation Intel® QM77
I/O Chipset	2nd Generation Intel® QM77
Ethernet	Intel® 82579LM, 10/100/1000Base-TX
TPM	v1.2 (optional)
BIOS	AMI BIOS SPI type, 16MB ROM
EEPROM	Atmel® AT24C02, save BIOS and configuration data (Optional)
Wake On Lan	Yes
Watchdog Timer	ITE8518E-L, 255 levels
H/W status Monitoring	Supports CPU temperature monitoring
Expansion interface	PCI-Express [x16] x 1 PCI-Express [x1] x 7 LPC bus x 1 SMBus x 1 UART x 2 (TX/RX only)
Power Requirement	+12V only 2-pin wafer for RTC battery
Power Consumption	—
Board Size	4.92" (L) x 3.74" (W) (125mm x 95mm)
Gross Weight	0.66 lb (0.3 kg)
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	—
Display	
	Supports CRT/SDVO or HDMI / DP, CRT or HDMI/ DP / DVI simultaneous/ three view displays
Chipset	Intel® Core™ i7/i5/i3/Celeron® processor integrated DirectX 11, OpenGL *3.1, OpenCL* 1.1 Integrated hardware MPEG2 decoder
Memory	Shared system memory up to 512MB/ DDMT 5.0
Resolution	Up to 2560 x 2048 for CRT (two display), 2048 x 1536 for three displays Up to 1920 x 1200 (UXGA) for LCD/HDMI Up to 2560 x 1600 for DP Up to 2548 x 1536 for DVI
LCD Interface	Up to 24-bit dual-channel LVDS
SDVO/DVO/Side Port	Supports SDVO x1
HDMI	Supports HDMI x3
DVI	Supports DVI x 3
DisplayPort	Supports DisplayPort™ x 3



I/O	
Storage	SATA 3.0Gb/s x 2 SATA 6.0Gb/s x 2
Serial Port	UART x 2 (TX/RX only)
Parallel Port	—
USB	USB2.0 x 8 USB 3.0 x 4
Audio	High definition audio
GPIO	Up to 4 in and 4 out

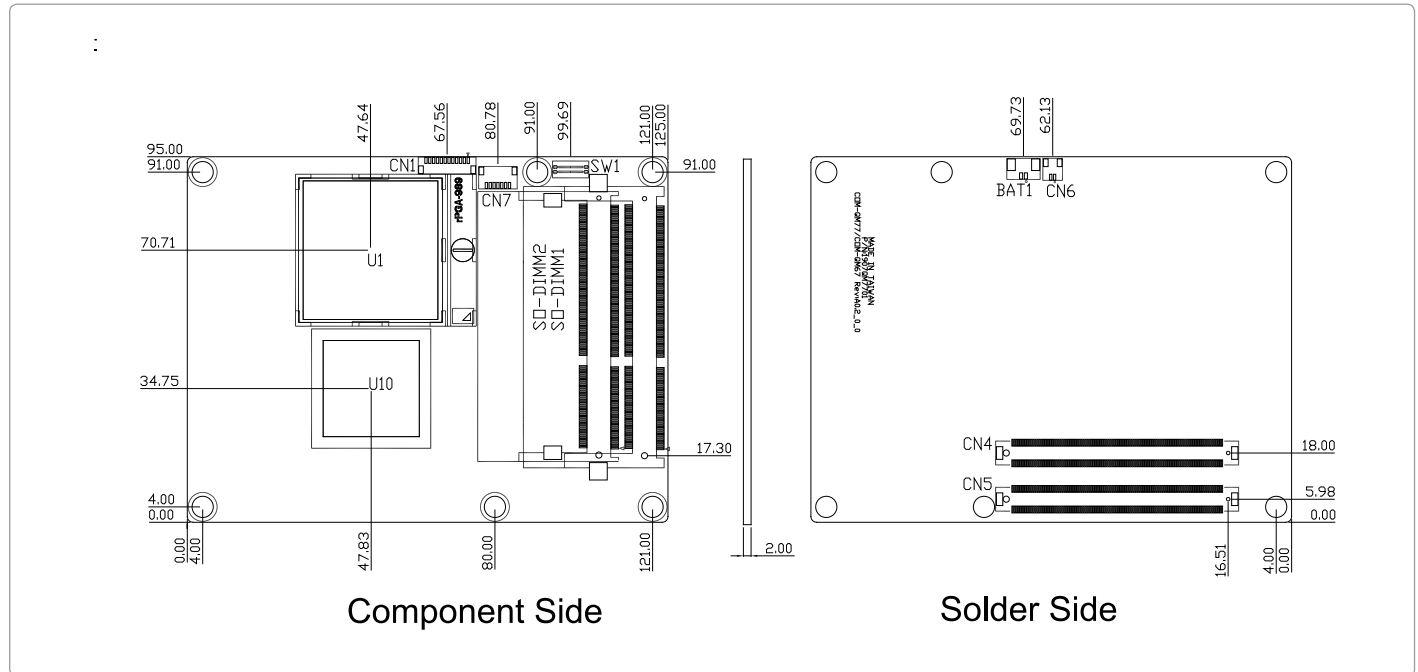
Packing List

- M2.5 Screw x 5
- Product CD
- COM-QM77 Rev. A

COM-QM77 Rev.A

Dimension

Unit: mm



Ordering Information

Part Number	COM Express Type	CPU	Memory	Display	LVDS	Storage	LAN	USB	URAT	Expansion Slot	Power	Temp
TF-COM-QM77-A10	6 (COM.0 Rev.2.0)	2nd/3rd Generation Intel® Core™ Processors (Socket G2)	DDR3 SODIMM x 2 Max.16GB	CRT, LVDS, SDVO, HDMI, DP, DVI	24-bit dual channel	SATA3 x 2 SATA2 x 2	GbE x 1	USB3.0 x 4 USB2.0 x 8	2 (TX/RX)	PCI-E[16] x 1 PCI-E[1] x 7	12V	0°C ~ 60°C

Optional Accessories

- **TF-ECB-917T-A10**
COM Express Type 6 Carrier Board, Mini-ITX, Dual Gigabit Ethernet, 2.1CH Audio, 4 COM, USB3.0, PCI-Express, AT/ATX, Rev. A1.0
- **TF-PER-A114**
Heat Spreader, For COM-QM77, Socket G2
- **TF-PER-A115**
CPU Cooler, 45W, for COM Express Basic Size

Intel® Embedded CPU Support List

CPU Socket	Generation	Brand	CPU No.	Clock Speed	Smart Cache	TDP
rPGA988B/G2	2nd	Core™ i7 Quad	i7-2710QE	2.1G	6M	45W
	2nd	Core™ i5 Dual	i5-2510E	2.5G	3M	35W
	2nd	Core™ i3 Dual	i3-2330E	2.2G	3M	35W
	2nd	Celeron® Dual	B810	1.6G	2M	35W
	*3rd	Core™ i7 Quad	i7-3610QE	2.3G	6M	45W

* 3rd Generation Intel® Core™ i5 and Intel® Core™ i3 Embedded Processors on the PGA Package are TBD.