

# Industrial Single Board Computer

## PICMG 1.3 Full-size CPU card FS-A78

Support 4<sup>th</sup> Generation Intel® Core™ i7, Core™ i5, Core™ i3, Celeron and Pentium CPU with Onboard VGA, DVI, LVDS, Display port, HD Audio, Serial ATAIII, USB3.0 & 2.0, Gigabit LAN, PCIE X16, PCI, mSATA



<b>Form Factor</b>	PICMG 1.3 Full-size CPU Card
<b>CPU</b>	Supports 4 <sup>th</sup> Generation Intel® Core™ i7/ i5/ i3/Celeron/Pentium Desktop Processor. Package type: FCLGA1150
<b>Memory</b>	Two DDR3/DDR3L (supports 1.5V) 1333/1600 DIMM up to 16GB
<b>Chipset</b>	Intel® Q87 PCH
<b>Real Time Clock</b>	Chipset integrated RTC with onboard lithium battery
<b>Watchdog Timer</b>	Generates a system reset with internal timer for 1min/s ~ 255min/s
<b>Power Management</b>	Supports ACPI 4.0 compliant
<b>Serial ATA Interface</b>	Intel® Q87 PCH built-in 4 x Serial ATAIII interface up to 600MB/s Support RAID 0, 1, 5, 10 and Intel Rapid Storage Technology.(does not support SATA II devices)
<b>VGA Interface</b>	Intel® Clear Video integrated HD Graphics Technology
<b>DVI Interface</b>	Onboard DVI connector
<b>LVDS Interface</b>	Onboard 24-bit dual channel LVDS connector with +3.3V/+5V/+12V supply
<b>Display port Interface</b>	Onboard Display port connector
<b>Audio Interface</b>	Intel® integrated Q87 with Realtek ALC888 HD Audio.
<b>LAN Interface</b>	1 x Intel® I210 Gigabit LAN 1 x Intel® I217-LM Gigabit LAN
<b>GPIO interface</b>	Onboard programmable 8-bit Digital I/O interface.
<b>Extended Interface</b>	Support 1 PCI-Express x16 and 1 PCI-Express x4 or 4 PCI-Express x1, 4 PCI, MSATA (mSATA only supports SATAIII)
<b>Internal I/O Port</b>	1 x RS232/422/485, 5 x RS232, 1 x GPIO port, 1 x Audio connector, 1 x IrDA connector, 1 x SMBUS connector, 1 x CRT, 1 x LVDS, 1 x DVI, 1 x LPC, 1 x LPT(Parallel port), 4 x USB2.0 and 6 x USB3.0 ports, 4 x SATAIII
<b>External I/O Port</b>	1 x PS/2 Keyboard/Mouse Port, 1 x Display port, 2 x RJ45 LAN ports
<b>External Audio</b>	Line-in, MIC-in, Front, Rear, Center/Subwoofer.
<b>Power Requirement</b>	Need Backplane from Standard 24-pin ATX power supply (20-pin is compatible) and P4 4-pin 12V(Onboard)
<b>Dimension</b>	338mm x 126mm (L x W)
<b>Temperature</b>	Operating within 0~60 centigrade Storage within -20~85 centigrade

### Taiwan Commate Computer Inc.

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## Ordering Code

<b>FS-A78G01</b>	Onboard DVI, CRT, LVDS, Display port, USB3.0 & 2.0, 6 x Serial Port, SATAIII, IrDA, GPIO, LPC, LPT, Realtek HD Audio, SMBUS, mSATA, <b>1 x Gigabit LAN (I217LM)</b> . Support <b>1 PCI-Express x16</b> and <b>4 PCI-Express x1</b>
<b>FS-A78G04</b>	Onboard DVI, CRT, LVDS, Display port, USB3.0 & 2.0, 6 x Serial Port, SATAIII, IrDA, GPIO, LPC, LPT, Realtek HD Audio, SMBUS, mSATA, <b>1 x Gigabit LAN (I217LM)</b> . Support <b>1 PCI-Express x16</b> and <b>1 PCI-Express x4</b>
<b>FS-A78G201</b>	Onboard DVI, CRT, LVDS, Display port, USB3.0 & 2.0, 6 x Serial Port, SATAIII, IrDA, GPIO, LPC, LPT, Realtek HD Audio, SMBUS, mSATA, <b>2 x Gigabit LAN</b> . Support <b>1 PCI-Express x16</b> and <b>4 PCI-Express x1</b>
<b>FS-A78G204</b>	Onboard DVI, CRT, LVDS, Display port, USB3.0 & 2.0, 6 x Serial Port, SATAIII, IrDA, GPIO, LPC, LPT, Realtek HD Audio, SMBUS, mSATA, <b>2 x Gigabit LAN</b> . Support <b>1 PCI-Express x16</b> and <b>1 PCI-Express x4</b>

For further product information please visit the website at <http://www.commell.com.tw>

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