



Embedded Fanless System



	TWISTER	TWISTER	TWISTER	
Back Panel Motherboard I/O				
Blue-marked area is for extra functions				
Back Panel Expansion I/O Possibilities & more				
Including, but not limited to these functions				
Motherboard	CI170A	CI847A(W)-6C	CI770A-6C	
System Dimension(WxDxH)	300W x 200D x 85H mm	300W x 200D x 75H mm	300W x 200D x 75H mm	
Weight(Incl.M/B)	2.9 kg	2.9 kg	2.9 kg	
CPU	Intel 6th Core I processors	Intel Ivy Bridge Celeron 1047 UE 1.4 Ghz ; i3 / i7	Intel Mobile Ivy Bridge Processor	
Chipset	Intel® Q170	Intel Panther Point (PCH) HM76	Intel Panther Point (PCH) QM77	
Memory	Type / Capacity	DDR4 2133MT/s, Max up to 32GB	DDR3 1333 / 1600 MT/s, Max up to 16GB	DDR3 1333 / 1600 MT/s, Max up to 16GB
	SO-DIMM	2	2	2
	On board memory	N/A	N/A	N/A
SSD storage	CF (CFast)	-	CFast (Optional)	CFast (Optional)
	mSATA	Yes	Yes	Yes
	On Board SSD	-	Optional	Optional
HDD Space	mSATA / 2.5" HDD	2.5" HDD x 1	2.5" HDD x 1	
VGA / DP	2 x DP	Yes	Yes	
HDMI / DVI	1 x DVI	DVI / HDMI	DVI / HDMI	
USB	4 x USB 3.0	Built-in 4 x USB, expand up to 9 x USB (USB 3.0 x 2 + USB 2.0 x 7)	Built-in 4 x USB, expand up to 9 x USB (USB 3.0 x 4 + USB 2.0 x 5)	
PS2 KB / MS	N/A	Optional	Optional	
COM	4 (expand up to 8)	Built-in 4 x COM, expand up to 6 x COM	Built-in 4 x COM, expand up to 6 x COM	
PCI / PCIe	1 x PCIe x16 x8 x4 x1	Optional	Optional	
Mini-PCIe	1 x Full size Mini card for PCIe / mSATA / USB 1 x Full size Mini card for PCIe / mSATA / USB	2	2	
SIM Card Holder	1	2	2	
GPIO	8DI / 8DO	8DI / 8DO (Optional)	8DI / 8DO (Optional)	
Ethernet	4 x Intel GbE (expand up to 5 LAN)	2	2	
Mic-in / Line-out	N/A	Yes	Yes	
Power Input	DC IN +12V	DC IN +12V ; +9V~+36V (optional)	DC IN +12V	
Expansion	3G / 4G, GPS, Bluetooth, WI-FI	PoE LANs, GPS, IEEE1394, 3G / 4G, Bluetooth, WI-FI, I/O		
Operating Temp.	-20°C~60°C for mSATA / SSD HDD	0~45°C for HDD, -20°C~60°C for mSATA / 2.5" SSD HDD		
Operating Humidity	5%~95% @ 60°C, non-condensing	5%~95% @ 60°C, non-condensing		