



HT/PB2150 Families

Entry level fanless Panel and Box IPCs based on Intel® Bay Trail platform



DIGITAL AUTOMATION TECHNOLOGIES

HT/PB2150 - Highlights



- **Fanless Panel/Box IPCs** (operating temperature 0÷50°C)
- Featuring **ASEM STANDARDS**
- **ASEM UBIQUITY Basic Win32/64** runtime included
- Intel® **Bay Trail SoC platform** with 64bits architecture
 - **Celeron® J1900** 2Ghz (2.41GHz burst frequency), 4 cores – 4 threads – 2MB L2 cache – 10W
- **RAM** System memory expandable up to **8GB**
- **Slim** version (SL) for installation with limited depth in the back panel

HT2150

- **Wide range of 16 mln colors LED backlight TFT LCD displays**
 - 4:3 aspect ratio: 6,5", 8,4", 10,4", 12,1", 15"
 - Wide aspect ratio: 7", 10,1", 12,1", 15,6"



HT/PB2150 - ASEM Standards

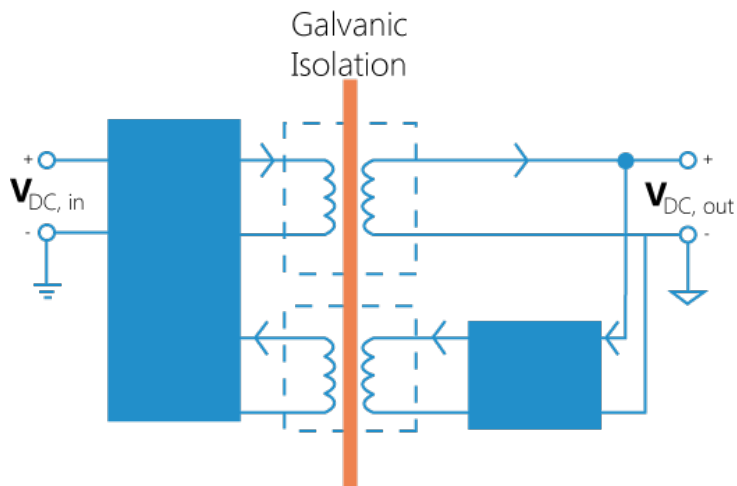
A **unique CUT-OUT** for each different size of LCD to ensure:

- Interchangeability among different Panel PC and Industrial Monitor families
- Future mechanical compatibility

Front panel available in four different variants for all new families:

- Aluminum with USB port and resistive touchscreen
- Aluminum True Flat with USB port and resistive touchscreen
- Stainless steel True Flat with resistive touchscreen
- Aluminum True Flat with Multi-touch P-CAP touchscreen

**ASEM
STANDARDS**



Isolated 24VDC power supply input to prevent:

- Common mode noise at low/medium frequencies on the power supply line
- Ground loop noise
- Extra-voltage caused by lightning and to guarantee
- Power supply with grounded positive terminal (e.g. Japan)

HT2150 - Features 1/2



	HT2150	HT2150-TF	HT2150-TFM
LED backlight TFT LCD	6,5" (4:3) – 640x480 7" (wide 15:9) – 800x480 8,4" (4:3) – 800x600 10,1" (wide 16:10) – 1280x800 10,4" (4:3) – 800x600 12,1" (4:3) – 800x600 12,1" (4:3) – 1024x768 12,1" (wide 16:10) – 1280x800 15.0" (4:3) – 1024x768 15.6" (wide 16:9) – 1366x768		7" (wide 15:9) – 800x480 Cut-Out "B" 10,1" (wide 16:10) – 1280x800 12,1" (wide 16:10) – 1280x800 15.6" (wide 16:9) – 1366x768
TOUCH-SCREEN	Resistive 5 wires GFG (optional)	Resistive 5 wires	P-CAP Multitouch
FRONT PANEL	Aluminum	True Flat Aluminum	
PROTECTION GRADE	IP66 – frontal		
PROCESSOR	Intel® Celeron J1900, 2GHz (2.41GHz burst frequency), 4 cores / 4 threads, 2MB L2 cache, 10W, 22nm technology		
VIDEO CONTROLLER	Intel® HD Graphics integrated in microprocessor, 688MHz Turbo, LVDS 8bit/color digital interface		
SYSTEM MEMORY - RAM	1GB or 2GB or 4GB or 8GB (1 x SODIMM DDR3 module)		
MASS STORAGE	1 bootable CFast slot on board with external rear access 1 x SSD mSATA SATA II connector		

HT2150 - Features 2/2



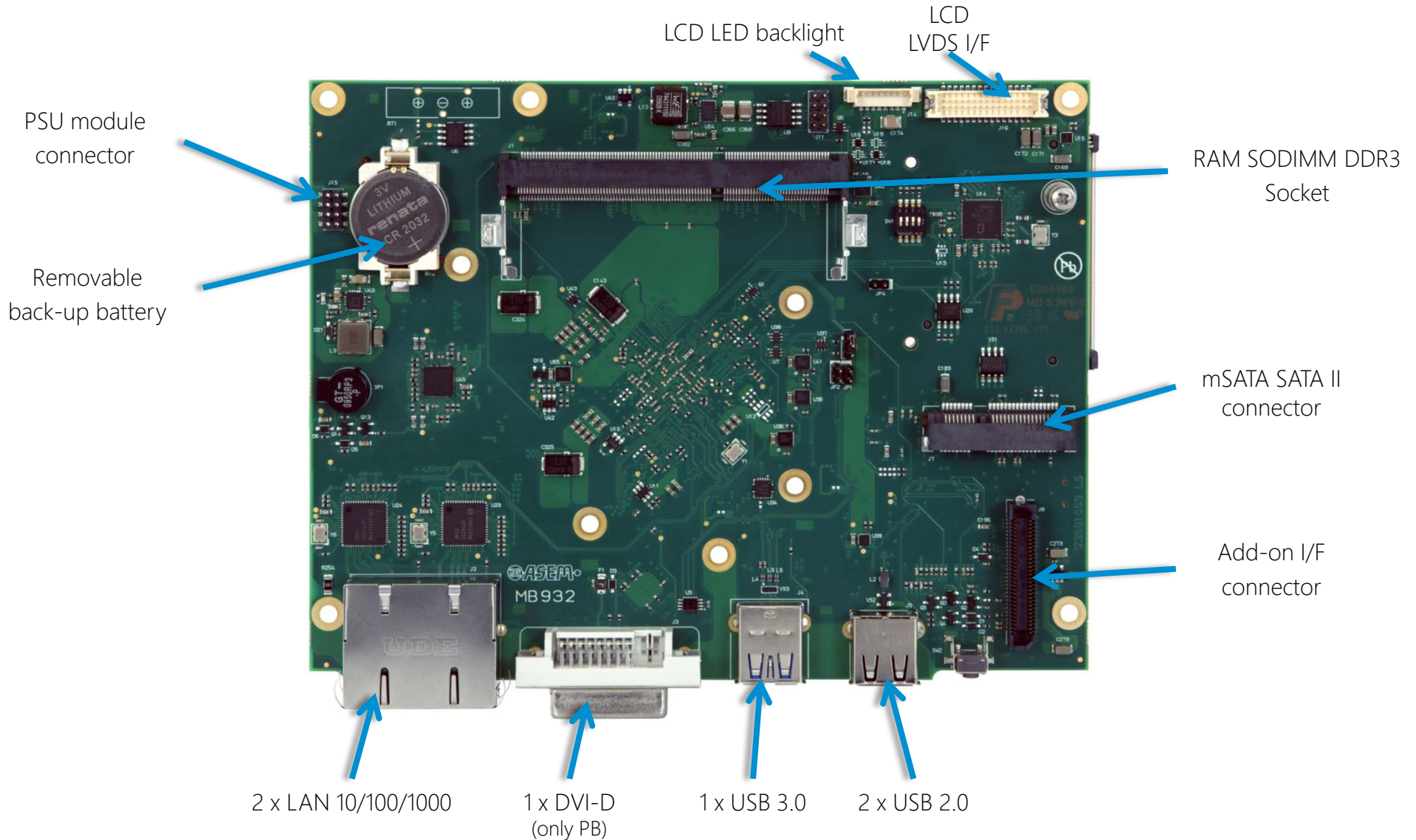
	HT2150	HT2150-TF	HT2150-TFM
LAN	2 x LAN 10/100/1000Mbps (2 x Intel® I210)		
USB	1 x USB 3.0, rear (Type-A) 1 x USB 2.0, rear (Type-A) 1 x USB 2.0, front (Type-A)		1 x USB 3.0, rear (Type-A) 1 x USB 2.0, rear (Type-A)
ADD-ON INTERFACES (optional for S0 – max 1)	1 x RS232/422/485 (DB15M)+ 1 x USB 2.0 (Type-A) 1 x RS232/422/485 (DB15M) isolated + 1 x USB 2.0 (Type-A) 2 x RS232 (DB9M) 1 x USB 2.0 (Type-A)		
POWER SUPPLY INPUT	24VDC isolated		
O.S. CERTIFIED	Microsoft Windows 10 IoT Enterprise 2016 LTSB 64bit, Microsoft Windows 8.1 Industry Pro 32/64bit, Microsoft Windows 7 Pro/Ultimate 32/64bit, Microsoft Windows Embedded Standard 7E/7P 32/64 bit (HT-TFM: no WES7E), Microsoft Windows Embedded Compact 7 Pro (in development), Linux		
	Other operating systems, such as VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility.		
OPERATING TEMPERATURE	0°- 50°C		
APPROVALS	CE, cULus 61010 (pending)		

PB2150 - Features

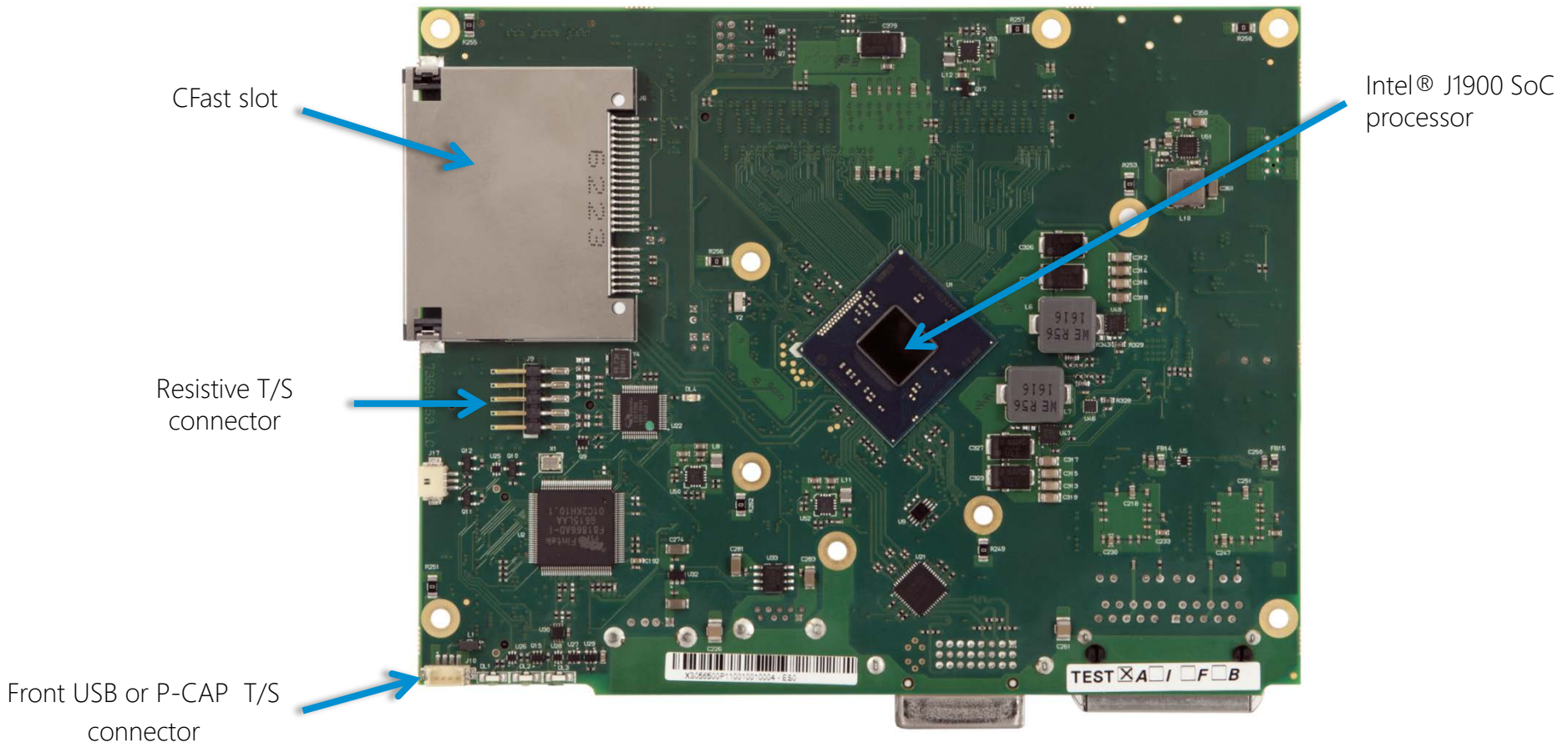


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SYSTEM MEMORY - RAM	1GB or 2GB or 4GB or 8GB (1 x SODIMM DDR3 module)
MASS STORAGE	1 bootable CFast slot on board with external rear access 1 x SSD mSATA SATA II connector
LAN	2 x LAN 10/100/1000Mbps (2 x Intel® I210)
USB	1 x USB 3.0 (Type-A, rear) 1 x USB 2.0 (Type-A, rear)
ADD-ON INTERFACES (optional for S0 – max 1)	1 x RS232/422/485 (DB15M)+ 1 x USB 2.0 (Type-A) 1 x RS232/422/485 (DB15M) isolated + 1 x USB 2.0 (Type-A) 2 x RS232 (DB9M) 1 x USB 2.0 (Type-A)
VIDEO OUTPUT	1 x DVI-D
POWER SUPPLY INPUT	24VDC isolated
O.S. CERTIFIED	Microsoft Windows 10 IoT Enterprise 2016 64bit, Microsoft Windows 8.1 Industry Pro 32/64bit, Microsoft Windows 7 Pro/Ultimate 32/64bit, Microsoft Windows Embedded Standard 7E/7P 32/64 bit, Microsoft Windows Embedded Compact 7 Pro (in development), Linux Other operating systems, such as VxWorks, QNX, etc., have not been certified by ASEM but they are reasonably supported by the Intel platform after verification of compatibility.
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HT/PB2150 - Motherboard «All-in-one» 932, top

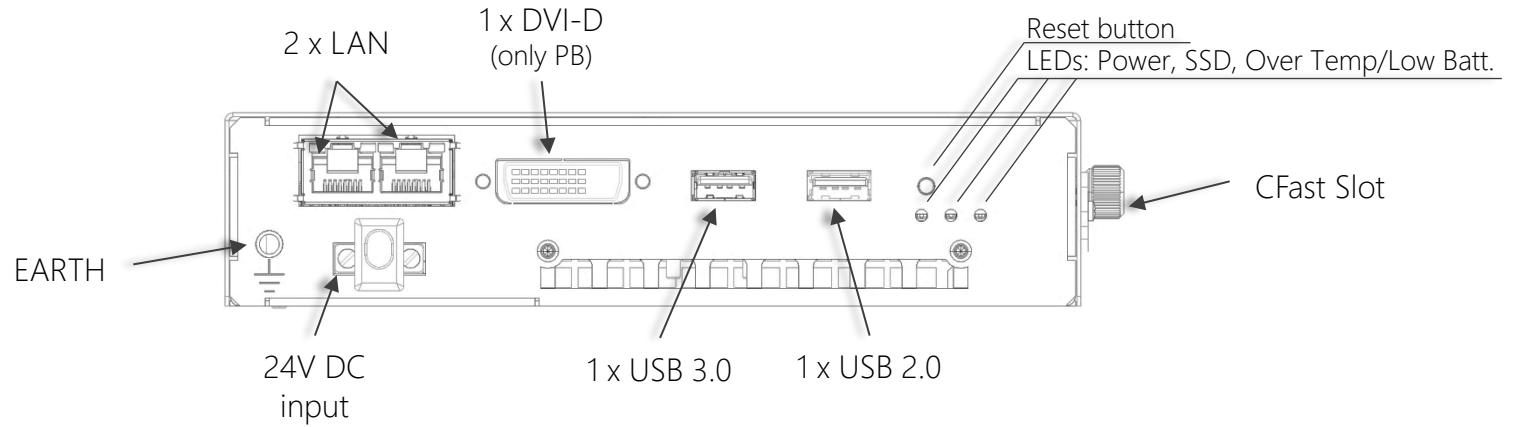


HT/PB2150 - Motherboard «All-in-one» 932, bottom

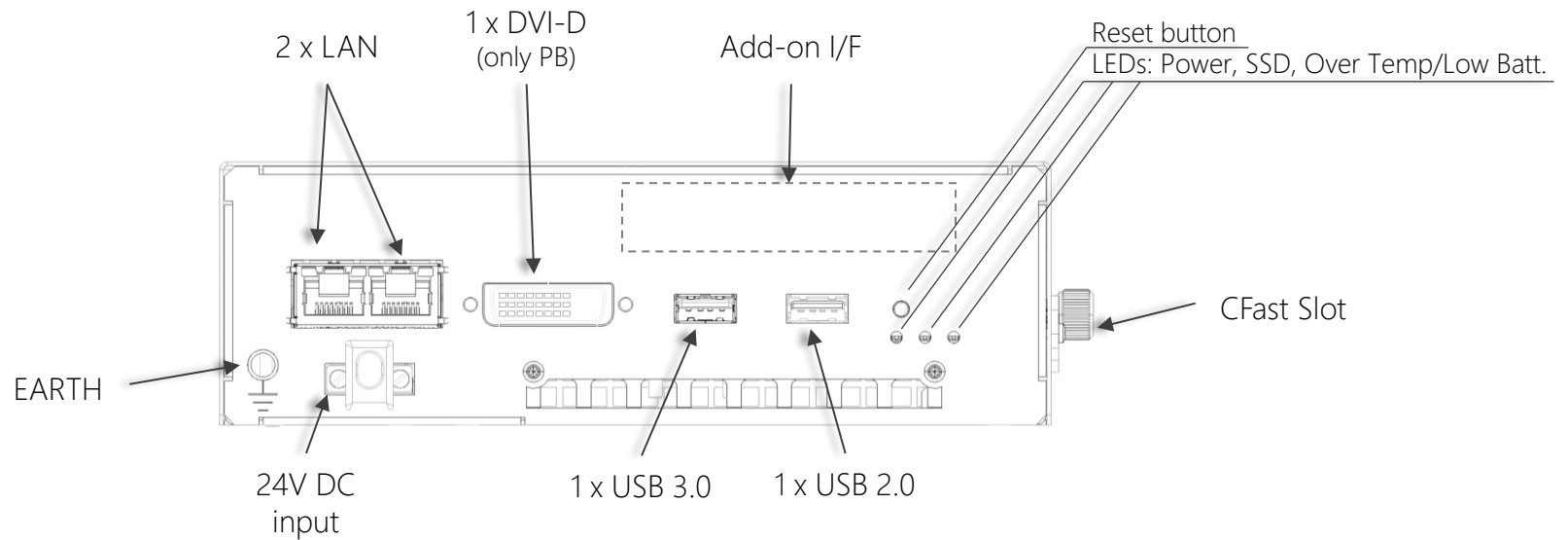


HT/PB2150 - Rear Interfaces & Connectors

SL



S0



HT/PB2150 - Processor

- Intel® **Bay Trail SoC** platform processor
 - **Celeron J1900**, 2.00GHz (2.41GHz burst frequency)
 - 4 cores, 4 threads processor with 64bit architecture (Desktop family)
 - 22nm technology process
 - 2MB L2 Cache
 - Fast memory - DDR3 1333MHz RAM
 - Low consumption - 10W TDP
- SoC (System on Chip), no companion chip, all the peripherals are managed directly by the processor



HT/PB2150 - O.S. compatibility

- Operating systems **certified by ASEM**
 - Win 10 IoT Enterprise 2016 LTSB 64bit
 - Win 8.1 Industry Pro 32/64bit
 - Win 7 Pro/Ultimate 32/64bit
 - Win Embedded Standard 7E/7P 32/64Bit
 - Windows Embedded Compact 7 Pro (in development)
 - Linux
- Intel® **Bay Trail platform** does not support:
 - Win XP Pro 32bit
 - Windows Embedded Standard 2009 (XPe SP3) 32bit
 - Win 2000/ 98/ NT
 - Win CE 5.0 Pro/Pro Plus
 - Win CE 6.0 Pro
- Operating systems supported by the Intel platform but not certified by ASEM
 - VxWorks
 - QNX

HT/PB2150 - Mass Storage

CFast

- 1 x bootable CFast slot on board with external rear access

CFast card



SSD mSATA

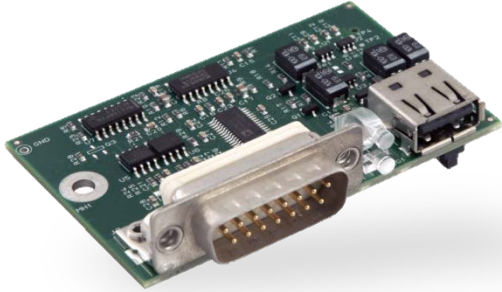
- 1 x mSATA SATA II internal connector for direct insertion of mSATA SSD

mSATA SSD

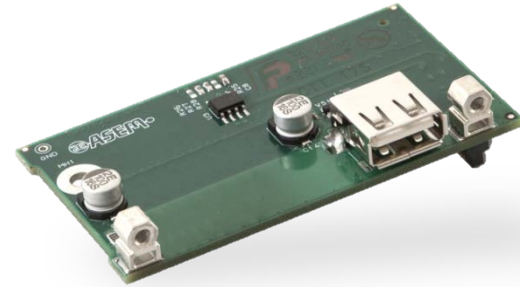


HT/PB2150 - ASEM add-on Interfaces (option)

1 x RS232/422/485 (DB15M) + 1 x USB 2.0



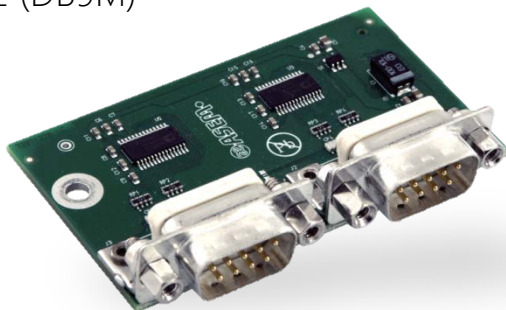
1 x USB 2.0 (Type A)



1 x RS232/422/485 optoisolated (DB15M) + 1 x USB 2.0



2 x RS232 (DB9M)



HT/PB2150 - Long term availability



ASEM S.p.A.
Via Buia 4
33011 Artegna (UD)
Italy
Tel. +39/0432-9671

industrialautomation@asem.it
www.asem.it

