

AFL-07A-ATOM

7" Fanless Widescreen WVGA Touch Panel PC

Intel® Atom™ N270 1.6G Processor

AFL-08AH-ATOM

8.4" Fanless SVGA High Brightness Touch Panel PC

Intel® Atom™ N270 1.6G Processor

AFL-10A-ATOM

10.4" Fanless SVGA Touch Panel PC

Intel® Atom™ N270 1.6G Processor

AFL-12A-ATOM

12.1" Fanless XGA Touch Panel PC

Intel® Atom™ N270 1.6G Processor



Intel® Atom™ Processor on board



Intel® Atom™ Processor



N270 with 512KB L2 cache 1.6GHz



Benefit

- Embedded CPU makes the system more stable
- Low power consumption increase the system life-cycle

► Features

- 7"~12.1" fanless system with resistive touch screen
- System memory up to 2 GB SDRAM
- Built-in 802.11b/g Wireless LAN
- Built-in Bluetooth module
- Built-in two 1.5 W speakers
- Built-in HSDPA module for mobile connection (Optional)
- One compact flash slot
- IP 64 compliant front panel

► Specifications



Model	AFL-07A-ATOM	AFL-08AH-ATOM	AFL-10A-ATOM	AFL-12A-ATOM
LCD Size	7"	8.4"	10.4"	12.1"
Max Resolution	800 * 480	800 * 600	800 * 600	1024 * 768
Brightness (cd/m2)	350	450	400	400
Contrast Ratio	400:1	500:1	500:1	500:1
LCD Color	262K	262K	262K	262K
Pixel Pitch (mm)	0.1905(H) x 0.1905(V)	0.213(H) x 0.213(V)	211.2(H) x 158.4(V)	0.240(H) x 0.240(V)
Viewing Angle (H-V)	140/110	120/100	120/100	160/160
Backlight MTBF	50000 hrs	50000 hrs	50000 hrs	50000 hrs
SBC Model	AFLMB-ATOM-R10			
CPU	N270 (Atom 1.6G)			
Chipset	Intel 945GSE / ICH7M			
RAM	Supports one 2GB (maximum) 400MHz or 533MHz DDR2 SO-DIMM			
I/O Ports and Switches	1 x RS-232 2 x USB 2.0 1 x RS-232/422/485 1 x Power Switch 1 x Reset Button 2 x LAN Ports 1 x Audio Jack			
SSD	CF Type II			
Watchdog Timer	Software programmable supports 1~255 sec. System reset			
Audio	AMP 1.5W + AMP 1.5W			
Expansion	1 x Mini PCIe (Wireless 802.11 b/g LAN Module) , 1 x Bluetooth Module (USB Interface, Bluetooth V2.0)			
HDD Drive Bay	N/A	N/A	N/A	1 x 2.5" SATA HDD or HSDPA module
Optional HSDPA Module	No	No	No	Yes
Construction Material	ABS + PC Plastic front frame			
LED Function	1 x Power ON/OFF LED on front panel			
Mounting	Panel, Wall, Rack, Stand or Arm VESA 75mm x 75mm / 100mm x 100mm			
Front Panel Color	Gray 7539U	Gray 7539U	Gray 7539U	Gray 7539U
Dimensions (WxHxD) (mm)	226 x 140 x 40.18	233.86 x 183.86 x 41.09	276 x 227 x 50.7	304 x 246 x 49.5
Operation Temperature (°C)	-10°C~50°C with CF Card			-10°C~50°C with CF Card 0°C~40°C with HDD
Storage Temperature (°C)	-20°C~60°C	-20°C~60°C	-20°C~60°C	-20°C~60°C
Net Weight	0.6 Kg	0.8 Kg	1.4 Kg	1.8 Kg
IP Level (front panel)	IP64	IP64	IP64	IP64
Safety & EMC	CE/FCC/CB/CCC			
Touch Screen	Resistive Type 4-Wire (touch controller IC is on board)		Resistive Type 5-Wire (touch controller IC is on board)	
Power Adapter	P/N:63000-FSP0361AD101C-RS Power:36W Input: 90VAC~264VAC @ 50/60Hz Output:12VDC	P/N:63000-FSP0361AD101C-RS Power:36W Input: 90VAC~264VAC @ 50/60Hz Output: 12VDC	P/N:63000-FSP0361AD101C-RS Power:36W Input: 90VAC~264VAC @ 50/60Hz Output: 12VDC	P/N:63000-FSP0481AD101C-RS Power:48W Input: 90VAC~264VAC @ 50/60Hz Output: 12VDC
Power Requirement	12VDC	12VDC	12VDC	12VDC
Power Consumption	23W	25W	28W	32W

The IEI Intel® Atom™ AFL PPC portfolio include the following size 7", 8.4", 10.4", and 12.1". The 45 nm Intel® Atom™ processor N270 has a 1.60 GHz clock speed and a 533 MHz FSB with a 512 KB L2 cache. The Intel® Atom™ is interfaced through the 533 MHz FSB to an Intel® 945GSE graphics memory controller hub (GMCH) which is in turn interfaced through a high-speed direct media interface (DMI) to an Intel® Mobil ICH7-M I/O controller hub (ICH).

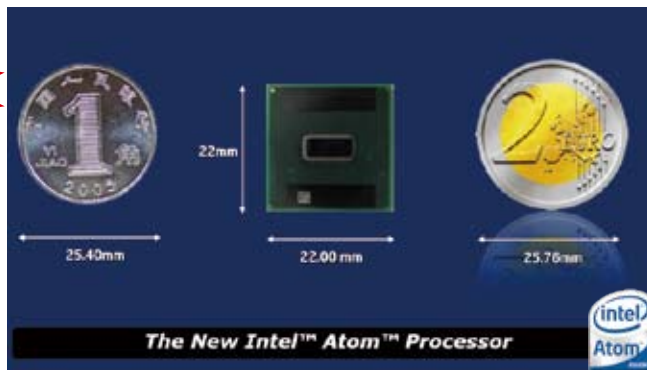
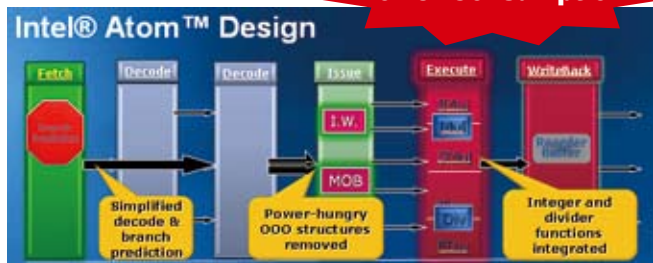


23W ~ 32W Ultra Low Power Consumption

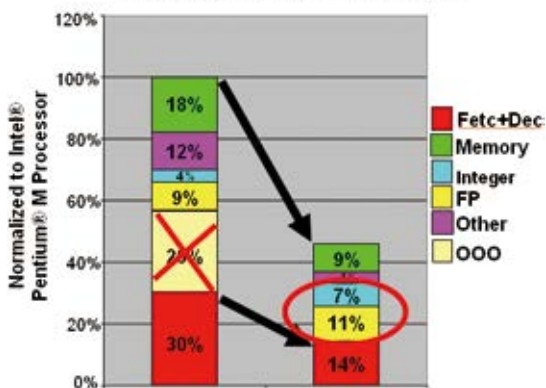
• ATOM Power Efficiency

New Microarchitecture design for Intel® Atom™ CPU, reduce 50% power consumption.

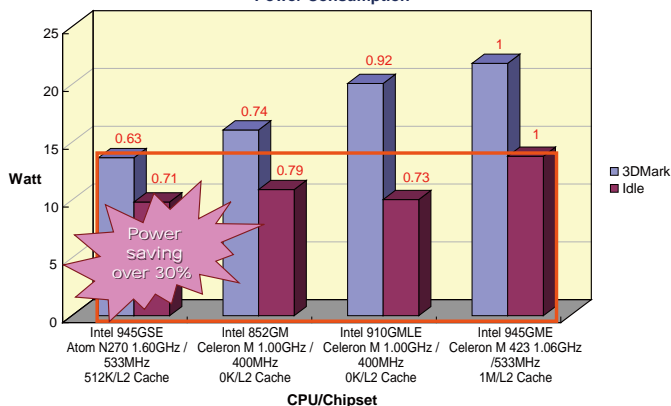
Reduce 50% Power Consumption



Processor Power Breakdown

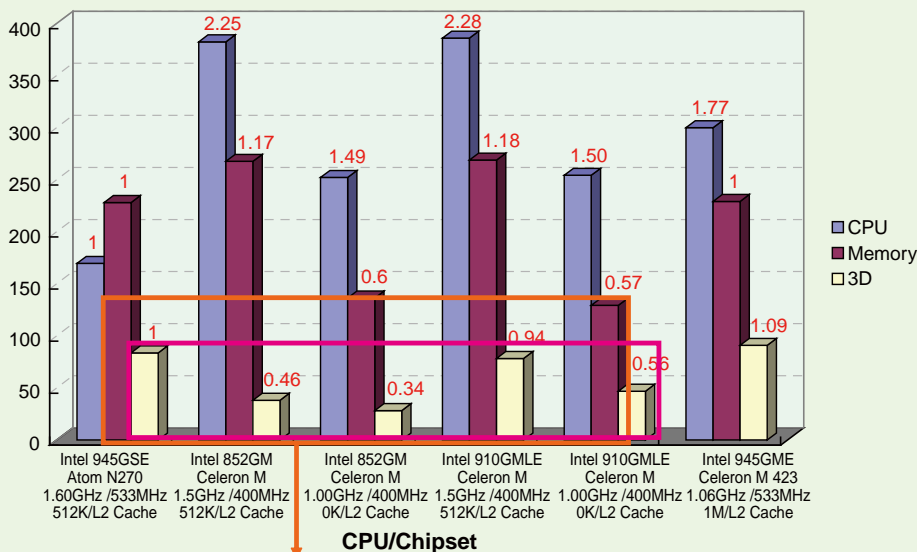


Power Consumption



• ATOM Performance

Passmark Performance



Memory Performance 40% better than Intel 915GMEL/1GZ & 852GM/1GZ
 Graphic Performance 40% better than Intel 910GMLC/1GZ, 65% better than 852GM/1GZ

CPU Comparison Table (Intel® Celeron® M / Intel® Atom™)

A. Reliable Fanless System

- Less down time
- Extended operational lives as they are not exposed to overheating problems caused by fan failures
- Reduce maintenance costs

**Reduce 50%
Power Consumption**



Chipset	910GMLE	945GSE
Graphic Core	Intel® Graphics Media Accelerator 900	Intel® Graphics Media Accelerator 900
Frequencies	1.0 GHz	1.1 GHz, 1.6 GHz
Process Technology	90 nm	45nm
FSB	533 MHz	533 MHz, 400 MHz
TDP	5.5 W	2.5 W Win!!
L2 cache	512KB L2 Cache	512KB L2 Cache
Multi Media Instruction Support	SSE, SSE2	SSE, SSE2, SSE3
Low Power Features	-	Enhanced Intel SpeedStep® Technology Hardware Coordinated P & C States

Applications



Home Automation



Factory Automation

Thermals

- Intel® Atom™ processor- SC TDP = 2.5W;
- 82945GSE TDP= 4W
- ICH7M= 1.5W

B. Excellent Digital Media Playback

AFOLUX PPC ATOM series integrated with Intel® Graphics Media Accelerator (GMA) 900 graphiccore for much better graphic playing.

Applications



POS System



Digital Signage

Industrial

Physical Security

Medical

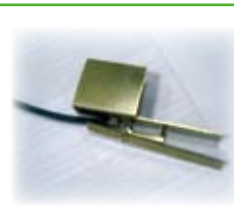
Infotainment

Interactive Client

Federal

C. High Speed WiFi 802.11 b/g WLAN Networking

802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.



Hidden Antenna Inside

Integrated PIFA antenna on the AFOLUX ensures an uninterrupted wireless connection. PIFA (Planar Inverted F Antenna) type antenna can receive high-quality, uniform signals in any location from all directions without any signal degradation or impedance and are the most efficient antennas on the market today.

	802.11b	802.11g
Data Rate (Mbps)	11	54
Range (Radius Indoor)	38 Meters	38 Meters
Range (Radius Outdoor)	140 Meters	140 Meters
Radio Frequency	2.4 GHz to 2.5 GHz	2.4 GHz to 2.5 GHz

D. HSDPA Mobile Solution (Optional for 12.1" AFOLUX PPC)

An optional IEI HSDPA module on the AFOLUX all-in-one panel PC enables easier access to the Internet through a WCDMA/GSM network, allowing web browsing, corporate and Internet email, vehicle positioning, remote LAN access, document sharing and collaborative working.

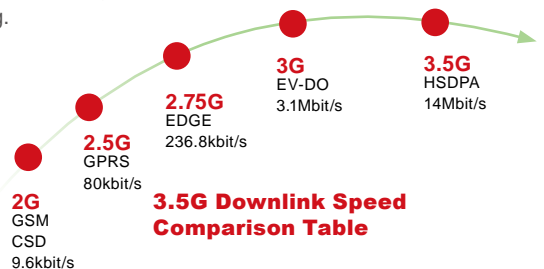


Credit Card Service in the Vehicle

GSM networks allow for rapid connectivity to the Internet, sending data in short bursts on the move.



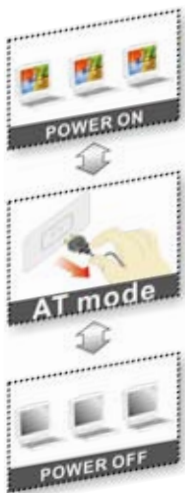
High connections to HSDPA-enabled cellular networks all over the world.



AT Mode



Work flow

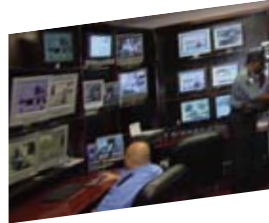


ATM



Information kiosk

ATX Mode



Security surveillance



Advertising terminal

POS



● Easy to turn on/ off with wall/ panel mounting

When implemented in shop flow applications it is easier to control the power through the central plug rather than a power switch.

● Automatic start when power connected

When in the AT mode the power is controlled by the central power unit. In AT mode the AFOLUX panel PC automatically starts when the power is connected. This enables multiple panel PCs on a production line to be controlled from a single point.

● Power management

ATX mode has a power management function inside that turns the system to standby mode to save power when the panel PC is not used. Therefore, when being used in POS applications, real power savings can be achieved.

● Remote control advantage

The standby function on the ATX mode power supply allows the AFOLUX panel PC to be turned on/off remotely via network. Users can set up each panel PC to be turned on/off at different times. Remote power mode control is perfect for advertising applications. Broadcasting times for each AFOLUX can be set at a single terminal and controlled remotely.

● V-Stand - VESA Standard multi-mounting stand

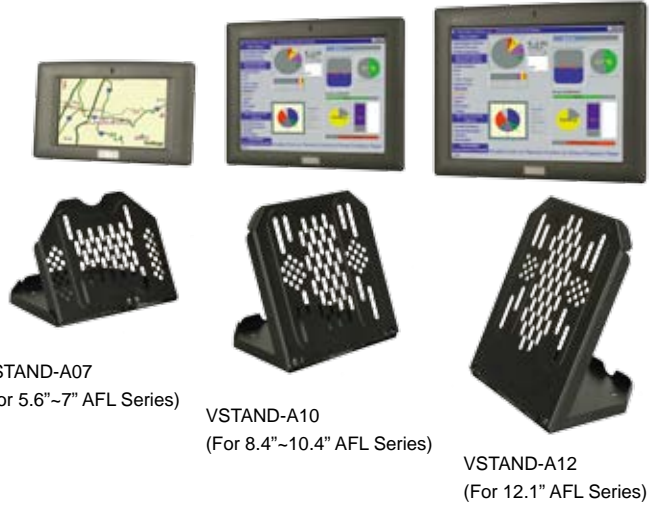
IEI patented multi-mounting V-Stand allows 0° to 90° adjustable Wall/Ceiling/Desk/Rear/Side mounting to meet diverse applications, mounting on kitchen, room and shelf.

Features:

- 0° to 90° adjustable hinge design allows comfortable viewing
- Standard VESA 75/100 Compliance
- Heat dissipation holes designed
- Compact size easy to use and mount anywhere



D. 5.6" ~ 12.1" AFOLUX PPC/Monitor Compatible



The Benefits~

A. One fits all solution

V-Stand is designed around compact and tilt adjustable. Providing mobility and ergonomic comfort fits common wall mounting and ceiling mounting situations.

Wall Mounting



Entry-Master Systems



Back office POS system

Ceiling Mounting



Car PC



Medical Control Panel

B. 0° to 90° Excellent adjustability

you can change the angle of the stand from 0° to 90° to reach almost any point with ergonomic features for comfortable viewing.

No Hinge Limitation!

C. Space saving and easy to install



POS system



Self-ordering System



1: Tighten the screws in the rear of the AFOLUX PPC VESA mounting holes



2: Select the position to mount stand kit



3: Plug in the system to operate

Compact size provides mobility



● Wall Mount



Food ordering Kiosk on the wall enhance the efficiency

Requires no cut out in the wall surface. It mounts directly on the existing wall or desk.

Fastening the retention screw to secure the PPC



AFLWK-12 for 7"~12.1" PPC (VESA 75)



● Desktop Stand

Adjustable stand kit allow users to work in comfort, reducing neck and back strain from improperly positioned screens and easily movable to anywhere.



Easy Stand



STAND-A08

STAND-A12

Forward & Back Tilt

● Panel Mount

Requires a cut out in the wall surface. With four clamps to tighten the screws that pass through the panel mounting clamps



Easy installed in the KIOSK enclosure



Panel Mount Kit



● ARM

Adjustable monitor arms could be easily mounted on the wall, ceiling, and desk.



Easy cable organize !!



ARM-11-RS

ARM-31-RS

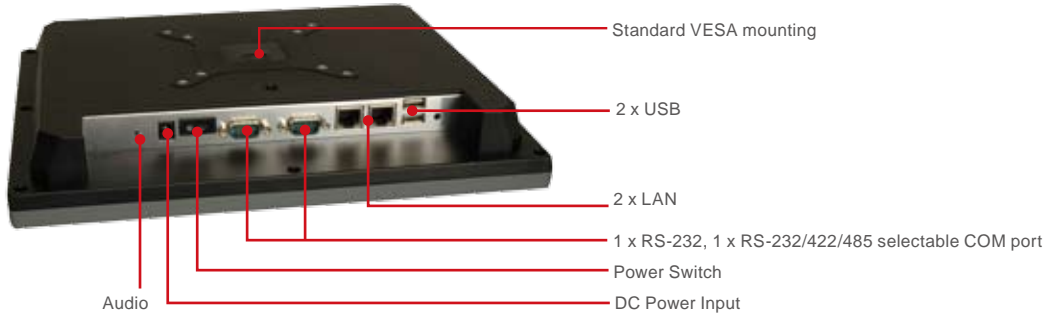
Mounting with adjustable arms to everywhere

Install Anywhere~

The AFOLUX PPC series with VESA standard mounting holes design, can be mounted virtually anywhere and in any forms including wall mounting, panel mounting, stand and arm options, giving you the flexibility to place the system in the best location.

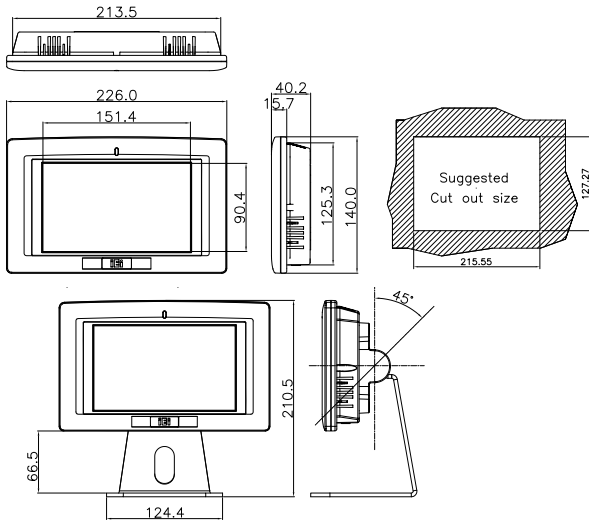


► Fully Integrated I/O

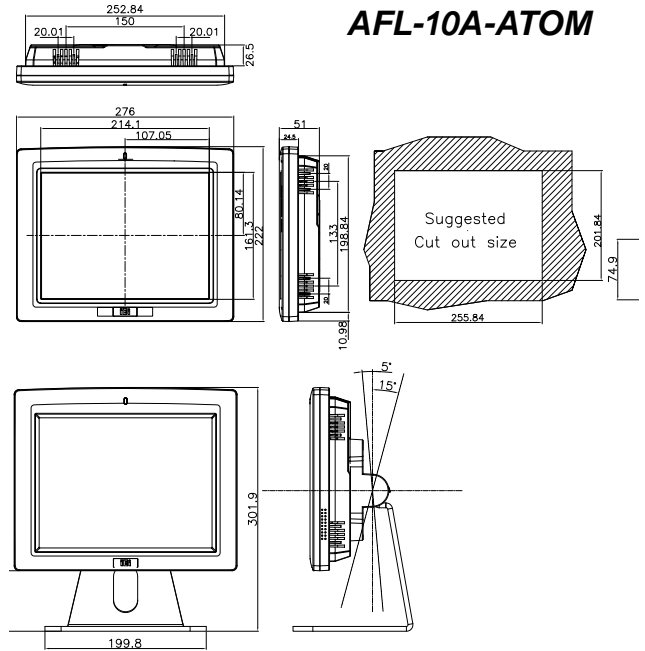


► Dimensions (Unit:mm)

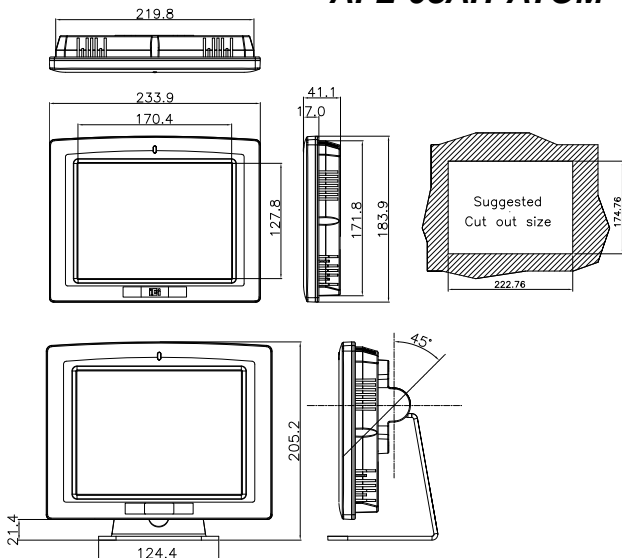
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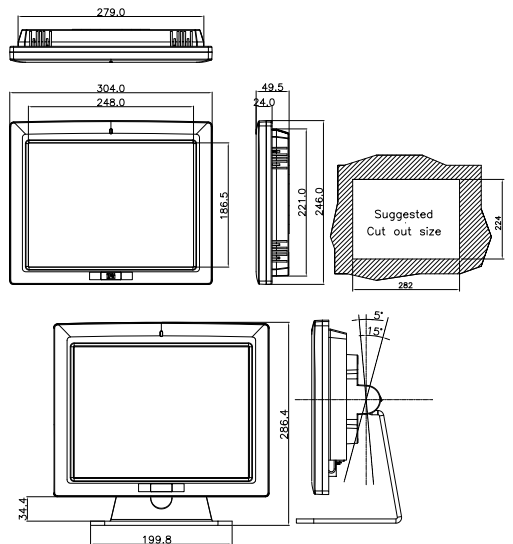
AFL-10A-ATOM



AFL-08AH-ATOM



AFL-12A-ATOM



► Options

	AFL-07A-ATOM	AFL-08AH-ATOM	AFL-10A-ATOM	AFL-12A-ATOM	
Panel Mounting Kit	AFLPK-12				
Wall Mounting Kit	AFLWK-12				
Rack Mounting Kit	AFLRK-07	AFLRK-08	AFLRK-10	AFLRK-12	
ARM	ARM-11-RS / ARM-31-RS				
STAND	STAND-A12 STAND-100-RS / STAND-150-RS				
VSTAND	VSTAND-A07	VSTAND-A10		VSTAND-A12	
OS	Win CE 5.0	AFLCF-07-ATOM-CE	AFLCF-08-ATOM-CE	AFLCF-10-ATOM-CE	AFLCF-12-ATOM-CE
	Win CE 6.0	AFLCF-07-ATOM-CE060	AFLCF-08-ATOM-CE060	AFLCF-10-ATOM-CE060	AFLCF-12-ATOM-CE060
	Win XPE	AFLCF-07-ATOM-XPE	AFLCF-08-ATOM-XPE	AFLCF-10-ATOM-XPE	AFLCF-12-ATOM-XPE
DC to DC converter module	IDD-930160-KIT				
Hybrid Card Reader	AFLP-08AMSI-U	AFLP-08AMSI-U	AFLP-10AMSI-U	AFLP-12AMSI-U	
Magnetic Stripe Reader	AFLP-08AMSR-U	AFLP-08AMSR-U	AFLP-10AMSR-U	AFLP-12AMSR-U	
DC 12V Input UPS	AUPS-A10-R10				
DC 9-36V Input UPS	AUPS-A20-R10				

► Packing List

Item	P/N	Q'ty	Specifications
Screws	44013-030041-RS	4	M3;ø5mm
Power Adapter	63000-FSP0361AD101C-RS (AFL-07A/08AH/10A-ATOM) 63000-FSP0481AD101C-RS (AFL-12A-ATOM)		90~264V;12V;36W
Power Cable	32000-000002-RS	1	1750MM,European Standard
User's Manual CD ROM	7B000-000087-RS	1	
Touch Pen	XTR104-0002-RS	1	

► Ordering Information

Part Number	Description
AFL-07A-ATOM-N270/WT-R/1GB-R10	7", 350cd/m2 WVGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g wireless module, bluetooth module, touch screen ,1GB DDR2 533,RoHS
AFL-08AH-ATOM-N270/WT-R/1GB-R10	8.4" 450cd/m2 SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g wireless module,bluetooth module, touch screen ,1GB DDR2 533,RoHS
AFL-10A-ATOM-N270/WT-R/1GB-R10	10.4" 400cd/m2 SVGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g wireless module,bluetooth module, touch screen ,1GB DDR2 533,RoHS
AFL-12A-ATOM-N270/WT-R/1GB-R10	12.1" 400cd/m2 XGA fanless panel PC with Intel® Atom™ N270 1.6GHz,802.11b/g wireless module,bluetooth module, touch screen ,1GB DDR2 533,RoHS