FUDA2 Single-Touch Panel PC Series

Slim and Fan-less 5-wire Resistive Touch Panel PC with Wide Temperature Support Powered by Intel® Bay Trail Quad-core Processor

In IPC market, a robust and highly reliable Panel PC system is a must to ensure non-stop and stable operation on production line. By enhancing performance and power efficiency, FUDA2 Series is an ideal HMI in factory automation, food and beverage industry, vending machine or semi-outdoor environments.

Product Introduction

FUDA2 Panel PC is the next generation of Portwell's standard Panel PC product line. Its ascendant, FUDA Panel PC, has been widely proven and adopted by industrial markets like application in factory automation and transportation. Keeping the successful designing and marketing experience in mind, FUDA2 Panel PC aims at serving IPC customers with much more powerful HMI solutions which provide high performance and low power consumption.

Powered by Intel® Atom™ platform, Bay Trail-I SoC processor E3845, which provides extended temperature and high I/O connectivity within 10W thermal design power (TDP), FUDA2 Panel PC is an ideal platform for applications like highly efficient and dedicated image signal processing with secure content delivery and visually appealing HMI thin clients.
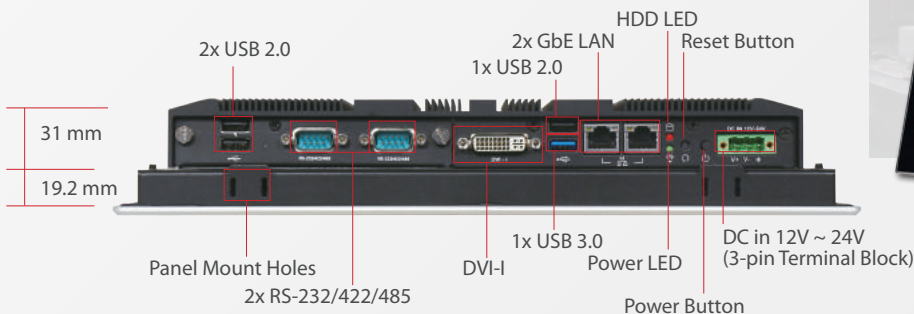
Wide Operating Temperature Support with Fan-less Design

FUDA2 Panel PC takes advantage of Intel® Atom™ E3800 family to operate under extremely hot and cold conditions. Compared to most Panel PC in the market, the operating temperature of FUDA2 Panel PC can be as low as -25°C or up to 70°C in spite of its fan-less design. Moreover, the cable-less structure optimizes the thermal dissipation as well as makes it more durable in rugged environments.

Effortless Upgrade

FUDA2 Single-Touch Panel PC Series has been designed to be 100% mechanically compatible with the previous FUDA Panel PC – offering a smart, economical and easy replacement or upgrade solution. Customers can enjoy the identical mechanical design to give a direct upgrade to Intel's latest platform without any need to modify existing machine cabinets or mounting kits.

2x USB 2.0
2x GbE LAN
1x USB 2.0
HDD LED
Reset Button
31 mm
19.2 mm
Panel Mount Holes
2x RS-232/422/485
DVI-I
1x USB 3.0
Power LED
Power Button
DC in 12V ~ 24V (3-pin Terminal Block)

FUDA

FUDA2

* The picture of FUDA2-S1011
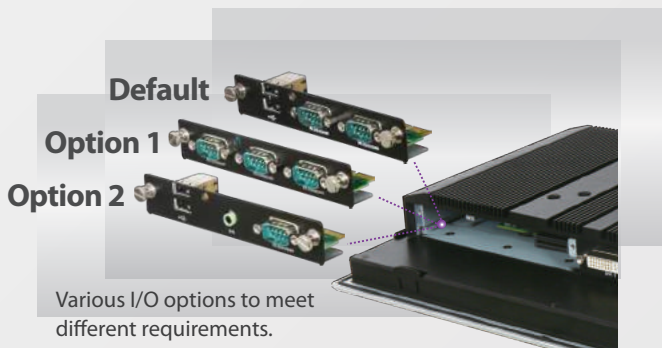
Ambient Light Sensor

■ An Ideal Panel PC for Semi-outdoor Application

Facilitated with an ambient light sensor, FUDA2 Single-Touch Panel PC Series is capable of automatically adjust panel brightness by sensing light intensity in the surroundings, which allows it to be more user friendly by optimizing the display's visibility in semi-outdoor environments. Other than providing comfortable viewing experience, this function also benefits FUDA2 Panel PC by lowering the power consumption and extending the lifetime of LED display.

■ A More Powerful and Flexible Panel PC

By adopting the latest Intel® Atom™ Bay Trail platform, FUDA2 Panel PC can achieve up to 3x the peak performance and 5x the power efficiency of the previous FUDA Panel PC; especially the visual processing capabilities are improved to enable faster media conversation as well as enhanced HD video transcoding. In addition, more functions are made available; for example, multiple storage including 2.5" HDD/SSD, CF and SD card, WiFi or 3G solutions; USB 3.0 is also adopted. Besides, one PCIe x1 slot and internal 2W speaker is reserved for project use.

Ordering Guide

AL6-3192	(R)ATO.FUDA2-S1011-AP1000.10.4" Bay Trail E3845 Panel PC with Aluminum Bezel and PW Overlay
AL6-3191	(R)ATO.FUDA2-S1211-AP1000.12.1" Bay Trail E3845 Panel PC with Aluminum Bezel and PW Overlay
AL6-3190	(R)ATO.FUDA2-S1511-AP1000.15" Bay Trail E3845 Panel PC with Aluminum Bezel and PW Overlay
AL6-3189	(R)ATO.FUDA2-S1711-AP1000.17" Bay Trail E3845 Panel PC with Aluminum Bezel and PW Overlay
AL6-3188	(R)ATO.FUDA2-S1911-AP1000.19" Bay Trail E3845 Panel PC with Aluminum Bezel and PW Overlay
AL6-3208	(R).ATO. FUDA2-S1830-0000-02.18.5" Intel Bay Trail E3845 Flat 5W Resistive Touch Panel PC

Default
Option 1
Option 2

Various I/O options to meet different requirements.

Product Features

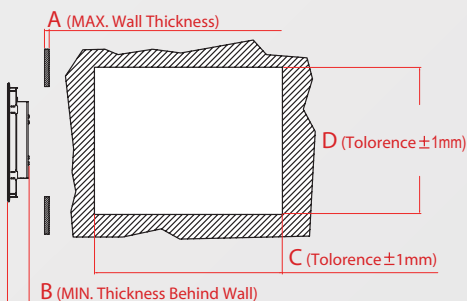| intel Atom inside | Light Sensor | Wide Temp. | Fan-less | Resistive Touch | WiFi ((3G)) | Slim Panel | IP65 | Wide Voltage 12V-24V | VESA Mount | Panel Mount |

Quick Selection Guide

FUDA2 Single-Touch 10.4" / 12.1" / 15" / 17" / 19" / 18.5"

Model Name	FUDA2-S1011	FUDA2-S1211	FUDA2-S1511	FUDA2-S1711	FUDA2-S1911	FUDA2-S1830
Display						
LCD Size	10.4"	12.1"	15"	17"	19"	18.5" (16:9)
Resolution	XGA 1024 x 768	XGA 1024 x 768	XGA 1024 x 768	SXGA 1280 x 1024	SXGA 1280 x 1024	1366 x 768
Brightness	450 cd/m²	500 cd/m²	450 cd/m²	350 cd/m²	350 cd/m²	350 cd/m2
Contrast Ratio	3000:1	700:1	700:1	1000:1	1000:1	1000:1
Backlight	LED type	LED type	LED type	LED type	LED type	LED type
Touch Screen	5-Wire Resistive Single Touch					F5WR Single Touch
System						
SoC	Intel® Atom™ Quad-core E3845 (1.91 GHz)					
Memory	DDR3L 1333/1600 SO-DIMM up to 8GB					
BIOS	AMI					
Graphics	Intel® Gen 7 Graphics					
LVDS	Single/ Dual Channel 24-bit					
LAN Chipset	Dual Intel® 1210IT Gigabit Ethernet (Support Jumbo Frame)					
Audio	Realtek® High Definition Audio Codec					
Watchdog Timer	Programmable 1 ~ 255 sec					
Storage Device	1 x 2.5" SATA HDD/ SSD, 1 x Compact Flash II up to 64GB, 1 x SD card					
OS	Windows 7/ Windows 8.1 / Windows 10 / Linux™					
I/O Interface						
Series Port	2 x RS-232/422/485 (Expansion: Option 0)					
Display	1x DVI-I					
USB	1 x USB 2.0, 1 x USB 3.0, 2 x USB 2.0 (Expansion: Option 0)					
Ethernet	2 x Gigabit Ethernet					
Others	1 x SMA Antenna hole for WiFi/3G Solution					
Expansion	1 x Half-size Mini-PCIe socket 2 x RS-232/422/485, 1 x RS-232 (Option 1) 1 x Line-out, 1 x RS-232/422/485, 2 x USB 2.0 (Option 2)					
Mechanical						
Dimesion(mm)(WxDxH)	314 x 253 x 50.2 mm	343 x 282 x 53.2 mm	425 x 330 x 55.6 mm	437 x 375 x 58.6 mm	480 x 400 x 58.6 mm	476 x 293 x 63.4 mm
Mounting (mm)	VESA Mount 75 x 75, 100 x 100; Panel Mount					
Weight (Kg)(N)	3.5 Kg	4.3 Kg	5.3 Kg	6.8 Kg	7.8 Kg	7 Kg
Weight (Kg)(G)	5.8 Kg	6.2 Kg	8.2 Kg	9.5 Kg	11.2 Kg	10.3 Kg
Power						
Power Supply	DC 12V ~ 24V input with 3-pin terminal block connector					
Consumption (Max)	32W(12V); 35W(24V)	29W(12V); 33W(24V)	30W(12V); 31W(24V)	38W(12V); 38W(24V)	34W(12V); 35W(24V)	42W(12V); 45W(24V)
Consumption (Min)	10W(12V); 11W(24V)	10W(12V); 11W(24V)	10W(12V); 11W(24V)	10W(12V); 11W(24V)	10W(12V); 11W(24V)	21W(12V); 22W(24V)
Environmental						
OP /Storage Temp	-25°C ~ 70°C / -40°C ~ 85°C (20 ~ 90% non-condensing)					0°C ~ 50°C / -20°C ~ 60°C
Vibration	1.0G(SD/CF/SSD) and 0.5G(HDD) , Power on & 2.16G, Packaged; 5~500Hz, IEC 60068-2-6					
Shock	15G peak acceleration, 11 ms (Power on condition), IEC 60068-2-27					
Drop	Packaged with Carton 96.5cm (1-Corner, 3-Axis, 6-Face), ISTA 2A Standard					
IP Protection	IP65 (Front) / IP20 (Rear), IEC 60529 Edition 2.1 Standard					
Certificate	CE/FCC Class A					

Cut out Dimension

A (MAX. Wall Thickness)
D (Tolorence ±1mm)
C (Tolorence ±1mm)
B (MIN. Thickness Behind Wall)

FUDA2 Single-Touch

	A (mm)	B (mm)	C (mm)	D (mm)	Mounting Kits (pcs)
FUDA2-S1011	<10.7	46.2	297	236	x 8
FUDA2-S1211	<10.9	49.2	326	265	x 12
FUDA2-S1511	<11.3	49.6	409	313	x 16
FUDA2-S1711	<12	52.6	420	358	x 16
FUDA2-S1911	<12	52.6	463	383	x 20
FUDA2-S1830	< 10.7	58.1	452	277	X 16