

Energy Efficient Industrial Computer RGB Model (Atom Z530, Z510)

RoHS



Front view



Rear view

STC-A116(S)E
STC-A111(S)E

Energy Efficient Industrial Computer Analog RGB Model	Intel Atom Processor Z530 1.6 GHz Intel Atom Processor Z510 1.1 GHz	Windows Embedded Standard 2009
Boot devices SSD 4 GB x 2	Main memory 1 GB	Low power consumption Input voltage: +7 Vdc to +27 Vdc
Analog RGB x 1	LAN x 2 (1 Gbps) Serial port x 2, Audio capability	Small, silent, heat dissipation 167 (W) x 109 (D) x 29 (H) [mm]

Applications

- Production Line Operating Information Display
- Inspection, Test Results Information Collection System
- Airports Flight Status and Flight Information Display
- Train/Bus Stations Gate Control System
- Road/Air Noise Measurement System
- Temperature/Voltage Status Monitoring

Overview

Tiny, Powerful and Rugged All-In-One RGB Model

The computers offer RGB interface, making it perfect for connecting to existing legacy display. The tiny yet powerful computers are perfect for industrial application that requires continuous 24/7 operation.

Features

- [Intel Atom Z530 \(1.6 GHz\), Intel Atom Z510 \(1.1 GHz\)](#)
 - Achieves low power consumption and small foot print
- [Analog RGB Displays](#)
 - Analog RGB interface
- [Multiple Interfaces](#)
 - USB2.0 ports: 4
 - USB client port for SSD: 1
 - Gigabit LAN ports: 2
 - RS-232C ports: 2
- [Small Form Factor with Rugged Design](#)
 - Highly efficient heat dissipation with a unique fanless design
 - Ultra thin and small factors for trouble-free site installation
 - 5 G anti-vibration and 100 G anti-shock for reliable operation
- [Wide Range DC Input](#)
 - +7 V to +27 V continuous operations suitable for vehicles with fluctuating DC power source
- [Low Power Consumption](#)
 - Less than 12 W power consumption for cost-effective industrial applications
- [Memory](#)
 - Full 1 GB Memory
 - Memory/SSD soldered directly on the board reduces power consumption.
- [Operating Systems](#)
 - Windows Embedded Standard 2009
- [No Moving Parts](#)
 - Makes for a quiet operation
- [External Storage Device](#)
 - SSD 4 GB

Specifications

Model		STC-A116(S)E	STC-A111(S)E
CPU	Processor	Intel Atom Processor Z530	Intel Atom Processor Z510
	Frequency	1.6 GHz	1.1 GHz
Energy Efficient Industrial Computer Analog RGB Model			
Chip Set		Intel US15W	
BIOS/Loader		Phoenix SecureCore BIOS	
Main Memory		1 GB : DDR2-SDRAM DDR2-533 (without memory socket) (Micron)	1 GB : DDR2-SDRAM DDR2-400 (without memory socket) (Micron)
Graphics	Controller	Built into Intel US15W	
	Video Memory	Shared with main memory	
	Resolution	1920 x 1080 (max.) * Maximum resolutions may vary depending on monitor's resolution.	
OS		Windows Embedded Standard 2009	
Boot Device		SSD 4 GB	
Auxiliary Device		SSD 4 GB	-
Data Space of Boot Drive		1.5 GB	
Switch		Power switch	
LED		Power indicator LED x 1, disk access LED x 1	
Interfaces	USB	USB Rev.2.0 Series A connector x 4, miniAB connector x 1 The maximum supply current is 1 A per port. Total amount of all ports is 2 A.	
	LAN	RJ-45 connector x 2 WG 82574IT controller (Intel) 1000BASE-T, Wake On LAN, Jumbo Frame compatible, Teaming compatible	
	Audio	Realtek ALC889 Line output x 1 (stereo ϕ 3.5 mini jack) (impedance: 100 Ω) Microphone input x 1 (stereo Φ 3.5 mini jack) (impedance: 12 k Ω to 16 k Ω (min.))	
	Display	Analog RGB x 1 15-pin D-sub connector	
	Keyboard	PS/2 compatible 6-pin round DIN connector x 1	
	Mouse	Sharing a connector with keyboard (Prepare an optional splitter cable.)	
	Serial Port	16550 compatible 9-pin D-sub connector x 2	
	External I/O Connector	4-pin connector (Power On/Off x 1, normally-open relay contact RAS output x 1)	
Dimensions (W x D x H)		167 x 109 x 29 [mm]	
Input Voltage		Typical : +7 Vdc to +27 Vdc Maximum : +6.5 Vdc to +36 Vdc DC cable included (0.5 m, one end cable)	
Allowable Power		8 W (min.), 12.0 W (max.)	
Chassis Cooling Fan		No	
Calendar Clock Backup Battery		Large capacity battery (typical life time: 10 years) BR-1/2AA (Panasonic Corporation)	
Hardware Monitoring		CPU temperature/board temperature/power supply voltage	
Watchdog Timer		Software programmable (1 to 255 seconds) Time-up notification is software selectable either reset or interruption.	
Environment Resistance		Vibration resistance: 5.0 G (max.) - Vibration frequency: 10 Hz to 150 Hz - Displacement amplitude: 0.35 mm (half amplitude) - Acceleration amplitude: 49 m/s ² (5 G) - Duration: 75 minutes Shock resistance: 100 G (max.) - Duration of activity: 6 ms Noise immunity: Static electricity: in contact: +/-6 kV, in the air: +/-8 kV radiated electromagnetic field: 10 V/m Conduction: 10 V/m FTB: signal: 1 kV, power supply: 2 kV	
Operating Conditions		Temperature: 0 degrees C to +50 degrees C Humidity: 10% to 90% (non condensing)	
Weight		700 g	730 g
MTBF		115331 hours	115796

AC Power Type



The DC jack of the computer can be replaced to an AC jack.

Part No.: STC-A116A(S), STC-111A(S)E.

The input voltage of each model differs as follows;

AC Jack Type	DC Jack Type
STC-A116A(S)E, STC-A111A(S)E	STC-A116(S), STC-111(S)E
Typical: +12 Vdc	Typical : +7 Vdc to +27 Vdc Maximum : +6.5 Vdc to +36 Vdc

Board Type



The Board Type is also available.
It is easier to integrate to your device.

Part No: SBC-A116(S)E, SBC-A111(S)E



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