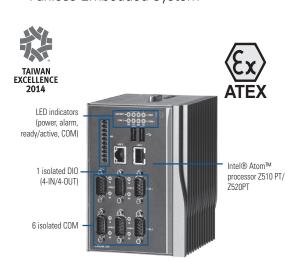




# rBOX101-6COM(ATEX)

ATEX Anti-Explosive Certified Robust Din-rail Fanless Embedded System











▲ Front view







rBOX101-6COM(ATEX) din-rail fanless embedded field controller supports extra low power Intel® Atom™ processors Z510PT and Z520PT with extended temperature range of -40°C to 70°C for use in extreme operating environments.

To prevent ESD and over-voltage, this super compact-size rBOX101-6COM(ATEX) is equipped with six isolated RS-232/422/485, one isolated 10/100/1000Mbps Ethernet & one isolated 10/100Mbps Ethernet and one isolated DIO port for offering magnetic isolation protection. Two power paths input minimize the risk of data loss in the event of a single power failure. Powered by IP30 housing, wide operating temperature range and Safety/EMI/EMS compliance, rBOX101-6COM(ATEX) is ideal for intelligent computing and communication solutions in critical environments such as power utility, transportation

The ready-to-run rBOX101-6COM(ATEX) equipped with AXView monitoring software is a total solution for power plant automation, facility monitoring systems, intelligent transportation systems, and more.

### **Specifications**

| Standard Color    | Sliver-Black                             |   |
|-------------------|--|---|
| Construction      | Extruded alumi                           | num and heary-duty steel, IP30  |
| CPU               | Intel® Atom™ p                           | processor Z510PT 1.1 GHz or Z520PT 1.33 GHz   |
| System Memory     | 1 x 200-pin DDR2 SO-DIMM max. up to 2 GB |   |
| System I/O Outlet | Serial Port                              | 6 x Isolated RS-232/422/485 (COM 1~6)<br>Interface select by software or BIOS<br>Supports Auto Flow Control in RS-485<br>mode<br>ESD protection 15 KV<br>Magnetic isolation protection 2KV<br>COM 1 & COM 2 speed up to 115.2kbps<br>COM 3 ~ COM 6 serial port speed up to<br>921.6kbps |
|                   | LAN                                      | 1 x 10/100/1000Mbps Ethernet<br>1 x 10/100Mbps Ethernet<br>Magnetic isolation protection 1.5 KV   |
|                   | USB                                      | 2 x USB 2.0<br>USB power distribution control by<br>software  |

# Features

- ATEX Anti-Explosive Type "nA" Zone 2 Group II Certification
- Fanless and cableless design
- Supports Intel® Atom™ processor Z510PT 1.1 GHz or Z520PT
- Wide temperature operation of -40°C ~ +70°C
- 6 isolated COM ports, 1 isolation DIO (4-IN/4-OUT)
- 2 isolated Ethernet
- 2 watchdog timer
- LED indicators
- SNMP V1/V2c
- Supports one CompactFlash™, one SD card (optional)
- 2 power paths with terminal block and 12-48VDC
- Supports AXView monitoring software package



| System I/O Outlet | DIO                                  | 1 x DIO (4-IN/4-OUT) DI: Input channels : 4, source type Input voltage : 0 to 30VDCDigital input levels for dry contacts : -Logic level 0: close to GND -Logic level 1: open Digital input levels for wet contacts : -Logic level 0: +10V to +24V (DI to COM-) -Logic level 1: +3V max. DO: Output channels : 4, sink type Output current: Max. 200 mA per channel On-state voltage : 24VDC nominal, open collector to 30V |  |
|-------------------|--------------------------------------|--|--|
|                   | 1/0.4                                | Optical isolation protection 3 KV  1 x DB15 connector  |  |
|                   | VGA                                  | 1 % 22 10 00111100101  |  |
|                   | Power Input                          | 2 x DC power input with terminal block   |  |
|                   | Alarm Contact                        | One relay output with current 0.5A<br>@30VDC   |  |
| Watchdog Timer    | 2 WDT                                |  |  |
|                   | WDT 1: one step is 1 sec, 255 levels |  |  |
|                   | WDT 2: one step is 250ms, 255 levels |  |  |
| LEDs              | System                               | Power, Alarm, Ready/Active, COM<br>(TXD,RXD)   |  |
|                   | Alarm                                | DC PWR1 or PWR2 is lost (default) User define event  |  |

<sup>\*</sup> All specifications and photos are subject to change without notice



## **Specifications**

| Storage               | Supports 1 x CompactFlash™ Supports 1 x SD card up to 32 GB (optional) |  |  |
|-----------------------|--|--|--|
| Installation          |  |  |  |
|                       | Din-rail, wall mount   |  |  |
| Power Supply          | 2 power paths  |  |  |
|                       | Power Input Range 12-48VDC   |  |  |
|                       | Power Input Rating 12-48VDC, 1.5-0.4A                                  |  |  |
|                       | Power Protection DC Version:<br>OVP (over voltage protection)          |  |  |
|                       | UVP (under voltage protection)   |  |  |
|                       | Reverse protection   |  |  |
| Operating Temperature | -40°C ~ +70°C (-40°F ~ +158°F)   |  |  |
| Storage Temperature   | -45°C ~ +85°C (-49°F ~ +185°F)   |  |  |
| Humidity              | 5% ~ 95%   |  |  |
| Weight (net/gross)    | 1.9 kg (4.18 lb)/ 2.24 kg (4.93 lb)                                    |  |  |
| Dimensions            | 100.6 mm (3.96") (W) x 110 mm (4.33") (D) x 135 mm (5.31")             |  |  |
|                       | (H)  |  |  |
| EOS Support           | XPE, WinCE, Linux support package, Windows® 7<br>Embedded              |  |  |
| ISO                   | Manufactured in an ISO9001 facility                                    |  |  |
| Anti-Explosive (      | ATEX Anti-Explosive Type "nA" Zone 2 Group II Certification            |  |  |
| , Alex                | Ex Marking :   |  |  |
|                       | Certificate No.: TUV 14 ATEX 7480 X                                    |  |  |
| Safety                | UL508, UL60950-1   |  |  |
| Compliance            | Heavy Industrial CE, including:  |  |  |
|                       | EN60950-1, IEC60950-1  |  |  |
| EMI                   | FCC Part 18  |  |  |
| Compliance            | Heavy Industrial CE, including:  |  |  |
| EN 40                 | EN61000-6-4, EN61000-3-2, EN61000-3-3                                  |  |  |
| EMS<br>Compliance     | EN50121-4 (Railway application) Heavy Industrial CE, including:        |  |  |
| Compilance            | EN61000-6-2  |  |  |
|                       | EN61000-0-2 (ESD standards)  |  |  |
|                       | * Contact: +/- 6 KV; criteria B  |  |  |
|                       | * Air: +/- 8 KV; criteria B  |  |  |
|                       | EN61000-4-3 (radiated RFI standards)                                   |  |  |
|                       | * 10V/m, 80 to 1000 MHz; 80% AM criteria A                             |  |  |
|                       | EN61000-4-4 (burst standards)  |  |  |
|                       | * Signal ports: +/- 2 KV; criteria B                                   |  |  |
|                       | * DC power ports: +/- 2 KV; criteria B                                 |  |  |
|                       | EN61000-4-5 (surge standards)  |  |  |
|                       | * Signal ports: +/- 1 KV; line-to-line; criteria B                     |  |  |
|                       | * DC power ports: +/- 0.5 KV; line-to-earth; criteria B                |  |  |

|                    | EN61000-4-6 (induced RFI standards)  |
|--------------------|--|
|                    | * Signal ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A   |
|                    | * DC power ports: 10 Vrms @ 0.15 ~ 80 MHz; 80% AM criteria A   |
|                    | EN61000-4-8 (magnetic field standards)   |
|                    | * 30 A/m @ 50, 60 Hz; criteria A   |
| Environmental Test | IEC60068-2-6 Fc (vibration resistance) 5 g @ 10 ~ 150 Hz, amplitude 0.35 mm (operation/storage/transport)      |
|                    | IEC60068-2-27 Ea (shock) 25 g @ 11 ms (half-sine shock pulse; operation); 50 g @ 11 ms (half-sine shock pulse; |
|                    | storage/transport)   |
|                    | IEC60068-2-32 Ed (free fall) 1 M (3.281ft)   |

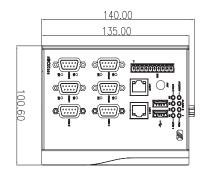
### **Ordering Information**

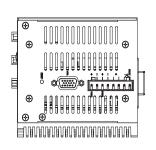
| Standard                        |   |
|---------------------------------|---|
| rBOX101-6COM (ATEX)-<br>FL1.1G  | ATEX anti-explosive certified robust din-rail fanless<br>embedded system with Intel® Atom™ processor Z510PT<br>1.1 GHz, ATEX and 6 isolated COM ports (-40°C ~ +70°C) |
| rBOX101-6COM (ATEX)-<br>FL1.33G | ATEX anti-explosive certified robust din-rail fanless<br>embedded system with Intel® Atom™ processor Z520PT<br>1.33 GHz and 6 isolated COM ports (-40°C +70°C)        |
| Optional                        |   |
| DDR2 SODIMM                     | 1 GB ~ 2 GB (with W.T. memory)  |
| DDR2 SODIMM                     | 1 GB ~ 2 GB (with 0°C ~ +85°C memory; operating temperature: 0°C ~ +70°C)   |
| CompactFlash                    | 2 GB or above (with W.T. CF)  |

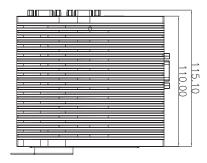
Wall mount kit

\*Specifications and certifications are based on options and may vary.

# Dimensions







Embedded



Embedded Systems for Transportation



#### Embedded Field Controllers

Controllers

Industrial Firewall



Embedded MicroBoxes



Industrial Barebone Systems



Industrial Chassis



Backplane



Power Supplies



Peripherals & Accessories

Overview

<sup>\*</sup> All specifications and photos are subject to change without notice.



# **Assured Systems**

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