

# AR-ES6003FL

Fanless and Dustproof Intel Atom D525/D425 Embedded System



## Features

- Support Intel Atom D525 (Dual Core) and D425 (Single Core)
- 2 x DDR3 SO-DIMM, up to 4GB
- Dedicated / selectable PCI & PCI Express x1 Expansion Slot
- Mini PCIe Expansion Slot
- Use JST connectors and switch to avoid cables drop
- Support Win XP, 7, Fedora 14 and Ubuntu 10



CE FC

## Specification

### System

|                     |  |
|---------------------|--|
| CPU                 | Intel Atom Dual Cores D525 and Single Core D425  |
| Chipset             | Intel ICH8M  |
| Memory              | <ul style="list-style-type: none"><li>• 2 x 204-pin SO-DIMM socket support DDR3-800 up to 4GB</li><li>• 1GB DDR3 pre-installed</li></ul> |
| BIOS                | SPI  |
| Hardware Monitoring | CPU voltage and temperature  |
| WatchDog Timer      | Software programmable 1~255 sec.   |

### Video

|                    |  |
|--------------------|--|
| Graphic Controller | Intel Atom D525/D425 integrated  |
| Video Memory       | DVMT 4.0   |
| Video Interface    | <ul style="list-style-type: none"><li>• 1 x VGA port (DB15)</li><li>• 1 x 18-bit LVDS (Pin Header)</li></ul> |

### Storage

|          |  |
|----------|--|
| SATA     | 2 x SATA II port with SATA II power connector    |
| CF       | 1 x Compact Flash Type I/II slot support UDMA 33 |
| Disk Bay | 1 x 2.5" SATA Disk Bay                           |

### I/O

|             |  |
|-------------|--|
| Ethernet    | 2 x GbE RJ45 with LED, Realtek RTL8111DL   |
| USB         | 6 x USB 2.0 (4 x external port, 2 x JST pin header)  |
| Serial Port | <ul style="list-style-type: none"><li>• 3 x RS232 (DB9)</li><li>• 1 x RS232/422/485 (DB9, switch selectable)</li></ul> |
| Audio       | Realtek Audio Codec (Line-out & MIC-in)  |
| GPIO        | 4 x TTL input<br>4 x 500mA digital output  |

### Expansion

|           |   |
|-----------|---|
| AR-RS20   | Riser Card (2 x PCI-E x1 expansion slots)           |
| AR-RS21   | Riser Card (1 x PCI + 1 x PCI-E x1 expansion slots) |
| Mini PCIe | 1 x Mini PCIe expansion                             |

### Power Requirement

|                   |  |
|-------------------|--|
| Power Input       | 12V (+/-5%) single voltage input, 3 poles terminal block |
| Power adapter     | 100 ~ 240V, 96W power adapter                            |
| Power Consumption | 32.6W @ 12V  |

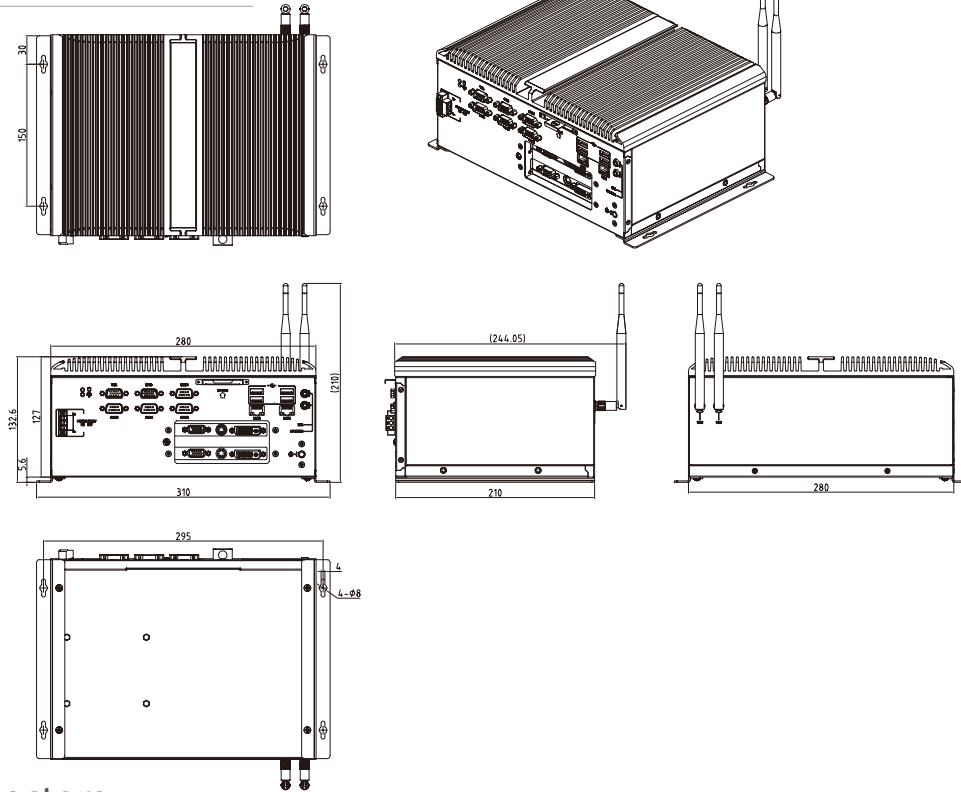
### Software

|            |   |
|------------|---|
| OS Support | Windows XP, Windows 7, Fedora 14, Ubuntu 10 |
|------------|---|

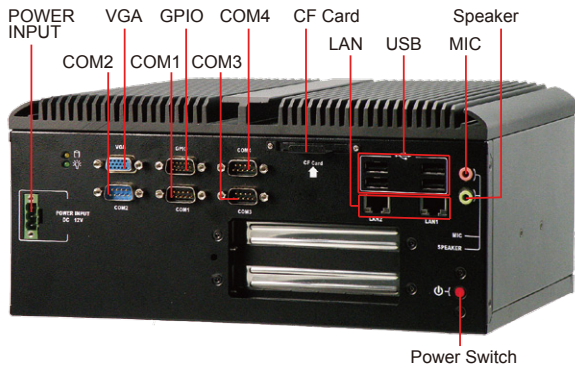
### Mechanical & Environment

|                   |                              |
|-------------------|------------------------------|
| Thermal Design    | Fanless                      |
| Chassis Material  | SECC + Aluminum heatsink     |
| Dimension         | 280mm x 210mm x 127mm        |
| Weight            | 2.5Kg                        |
| Operating Temp.   | 0~55°C (32~131°F)            |
| Storage temp.     | -20~80°C (-4~176°F)          |
| Relative Humidity | 0~90% @ 40°C, non-condensing |
| Safety            | CE, FCC class B              |

## Dimension



## I/O Connectors



## Packing List

- 1 x AR-ES6003FL
- 1GB memory pre-installed
- 1 x User manual & Driver CD
- 1 x AC Power Cord (USA or UK or Japan or Europe)
- 1 x 96W Power Adapter
- 1 x SATA cable & SATA power cable
- 2 x Mounting bracket
- 1 x AR-RS20 riser card
- 1 x AR-RS21 riser card

## Ordering Information

|                 |  |
|-----------------|--|
| AR-ES6003FLD525 | Intel Atom D525 Embedded System with 1GB DDR3 memory, PCI and PCI-E Expansion Slot |
| AR-ES6003FLD425 | Intel Atom D425 Embedded System with 1GB DDR3 memory, PCI and PCI-E Expansion Slot |

## Optional (Purchase Separately)

|             |  |
|-------------|--|
| WiFi Module | Mini PCIe card with RF cable and antenna |
| LVDS        | LVDS cable                               |