# QBOX-2020

Fanless Box PC with Intel Atom N270 CPU



- Intel Ultra Low Power Atom N270 CPU Onboard
- Dual Display Output (VGA and DVI-D)
- Support Embedded OS (Windows XPe and Linux)
- Dual Intel Gigabit Ethernet and 3 x RS-232
- Wide Range Operating Temperature -20~60°C
- Ultra Slim(35mm), Compact Size and Fanless
- DC 12V Power Input
- CF Socket

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## Product Overview

The QBOX-2020 is a fan-less Box PC which is ideal for space critical applications. This embedded hardware platform is designed with Intel® Atom N270 Processor which provides with excellent performance enabled by next- generation 45nm Process Technology. The system is supported with Intel® 945GSE / ICH7-M chipset, and DDR2 SO-DIMM up to 2GB. Featured are an 2.5" SATA HDD or SSD and 1x Internal Compact Flash Type II slot, 2 x GbE, 4 x USB 2.0, DVI-I, 2x COMs, GPIO, Audio ports, 1 x Mini-Card Slot. The QBOX-2020 provides high reliability rugged case not only for great protection from EMI, cold and heat, but also integrated with passive cooling design for quiet fan-less operation such as Transportation, Surveillance and Automation.

## Technical Information

| Construction | |
|---|---|
| | Aluminum Alloy |

| CPU | |
|---|---|
| | Intel® Atom N270 1.6 GHz Processor with 533 MHz FSB |

| Chipset | |
|---|---|
| | 945GSE / ICH7-M |

| Memory | |
|---|---|
| | 1 x DDRII-533 SO-DIMM Up to 2GB |

| Graphics | |
|---|---|
| | Integrated Intel® GMA950 GFx Core in 945GSE MCH |

| ATA | |
|---|---|
| | 1x 2.5" SATA HDD or 1x Internal Compact Flash Type II slot |

| LAN | |
|---|---|
| | 2 x Intel® 82574L Gigabit Ethernet |

| Watchdog | |
|---|---|
| | 1 ~ 255 Level Reset |

| I/O | | |
|---|---|---|
| | COM | Support 2 x RS-232 and 1 x RS-232/422/485 Ports |
| | USB | 4 x USB 2.0 Ports |
| | LAN | 2 x RJ-45 for GbE |
| | Video | 1 x DVI-I female connector for DVI-D and VGA Output |
| | GPIO | Support 4 in and 4 out GPIO ports (share with 1 x RS-232) |
| | Audio | Mic-in/Line-out |
| | Expansion | 1 x Mini-card slot |

| Storage | |
|---|---|
| | 1 x 2.5" drive bay for SATA Type Hard Disk Drive/SSD |
| | 1 x CF Socket |

| Cooling | |
|---|---|
| | Fanless |

| Environment | |
|---|---|
| | Operating Temp: -20°C to 60°C, ambient w/air |
| | Storage Temp:  -20°C to 80°C |
| | Relative Humidity: 10~95%@40°C (non-condensing) |
| | Vibration: Mil-STD-810F, Method 514.5, Procedure 1, Category 4 |
| | Shock & Crash: Operatiing 20G(11ms), Non-Operatiing 60G with HDD |
| | Operating 40G(11ms), Non-Operating 80G with CF/SSD |
| | Crash 100G(11ms) |
| | Power Input: DC 12V Input |

| Dimensions | |
|---|---|
| | 182 x 167.6 x 35 mm (LxWxH) |

| Weight | |
|---|---|
| | 960 g (bare-bone) |

| Mounting | |
|---|---|
| | Wall mount, VESA mount |

| Certifications | |
|---|---|
| | CE, FCC |

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