# BFN1KB

Rev. 2

Intel Powered
Fanless Mini PC



Featuring enhanced connectivity with additional Ethernet interfaces, M.2 expansion, TPM security support. Designed for secure, reliable networking, industrial applications, and advanced edge computing deployments.

### Intel Atom E3845

Powered by an Intel Embedded Atom E3845 quad-core (1.91 GHz) with 64-bit processing and AES-NI acceleration for efficient, reliable performance.

### Connectivity & I/O

Three Intel Gigabit Ethernet ports plus serial and USB for straightforward integration into network and industrial environments.

### Deployment Flexibility

Multiple boot/storage, expansion slots, and GPIO/I2C headers enable tailored builds for edge gateways, security appliances, remote sites, and lab deployments.

## Systems

| | |
|---|---|
| **Processor** | Intel Atom E3845 2M Cache (AES-NI) |
| **Processor Speed** | 1.91 GHz |
| **Processor Cores** | 4 (Quad-Core) |
| **Integrated Graphics** | Intel HD (2560 x 1600 @ 60Hz) |
| **Memory Capacity** | DDR3-1333 SO-DIMM (up to 8 GB) |
| **Storage** | 1 x mSATA |

## Internal I/O

| | |
|---|---|
| **Serial Ports** | 1 x RS-232, 2 x TTL (1 Mbit/s) |
| **TPM** | Optional |
| **GPIO** | 24-bit GPIOs |
| **USB** | 2 x USB 2.0 |
| **SIM Slots** | 2 x SIM Slots |
| **Power Source** | 1 |

## Rear I/O

| | |
|---|---|
| **Ethernet** | 3 x Intel WGI210AT (1 Gbps) |
| **USB** | 2 x USB2.0 |
| **Video** | 1 x RS-232, 2 x TTL (1 Mbit/s) |
| **Power Jack** | 5.5mm/2.5mm (12v/2amp) |
| **Power Button** | 1 |
| **Reset Button** | 1 |
| **Serial Port** | 1 x RJ45 |
| **SMA Cutouts** | 2 |

## Expansions

| | |
|---|---|
| **mPCIe1** | 4G/LTE |
| **mPCIe2** | WiFi/4G/LTE |
| **M.2** | 5G |

## Dimensions & Environmental

| | |
|---|---|
| **Dimensions (LxWxD)** | 189 x 157 x 29 mm |
| **Weight** | 1.7 Lbs |
| **Operational Temp:** | 0°C ~ 60°C (32°F ~ 140°F) |
| **Certifications** | RoHS, CE, FCC 47 CFR Part 15 |

## Other Features

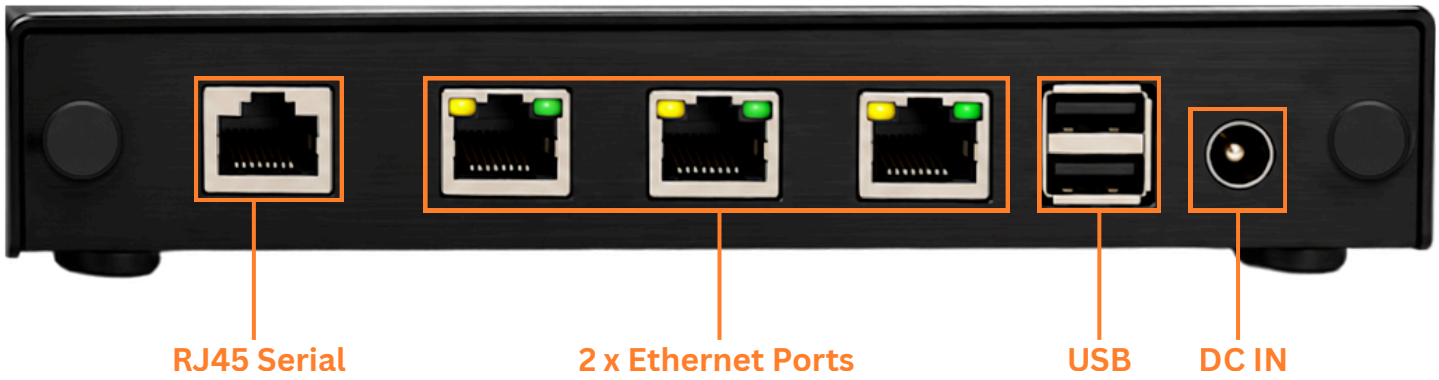
| | |
|---|---|
| **Watchdog** | 1~255 Mins Programable, Disable |
| **Customization** | Port labels, Branding |
| **Warranty** | 2 Years Standard + Extended Warranty |

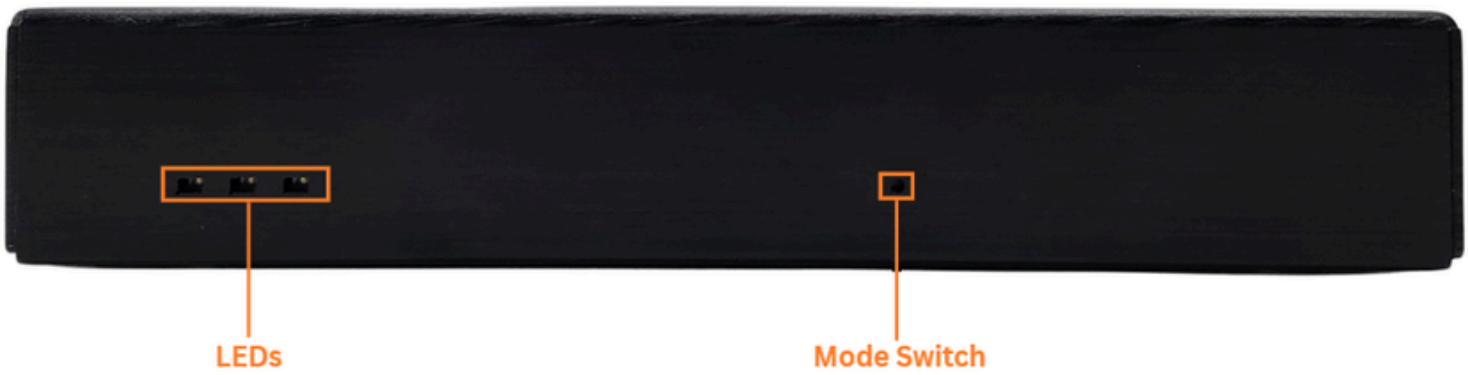
## Humidity

| | |
|---|---|
| **Operational** | 10 ~ 95% RH |
| **Storage** | 5 ~ 95% RH |

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## Product I/O View




### Safety & Handling

- Use only the recommended Power supply
- Do not operate outside specified limits
- Proper Grounding is required
- Installation must be performed by qualified personnel

### Contact Info

**Boingfire Systems**
7-871 Victoria Street N,
Unit 173, Kitchener,
ON, N2B 3S4,
Canada
**Email:** sales@boingfire.com
**Website:** boingfire.com

### Customization

- Enclosure & Appearance
- Memory & Storage
- Software & System Customization
- Branding & White Label Support
- Packaging & Accessories
- Custom BIOS Configuration
- Rackmount Brackets

**Disclaimer**
The information in this document is subject to change without notice. BFN1KB System specifications are provided for reference only and do not constitute a contractual obligation.

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