



Features

- Quad-Core Intel® Atom x5-E3940
- 8 GB DDR4 Onboard Memory
- 4 × Intel® I226-V 2.5GbE LAN Ports
- Flexible Storage Options
- Rich Expansion Capabilities
- Compact Fanless Industrial Design
- Full I/O & Embedded Features
- Supporting Multiple 4G/5G, Wi-Fi, LTE

Specifications

Processor System

CPU	Intel® Atom x5-E3940
Frequency	1.6/1.8 Ghz (Base/Burst)
L2 Cache	2.0 MB
BIOS	AMI 64 Mbit
AES	AES-NI
Cooling	Fanless thermal design

Memory

Technology	Onboard DDR4
Max. Capacity	8 GB (non-removable)
Form Factor	Soldered

Display

Interface	1 × Micro-HDMI
Max. Resolution	4096×2160 @ 60Hz (4K)

Ethernet

LAN Interface	4 × RJ45
Connector	RJ45
Controller	Intel® I226-V
Speed	2.5 Gigabit Ethernet
PoE	No

Watchdog Timer

Output	System Reset
Internal Timer	Programmable 1 - 255 sec. 1 - 255 Mins, Disable

Physical

Dimension	189 × 157 × 29 mm
Weight	1.71 Lbs (Approx.)

Internal I/O

Serials	1 × RJ45, 1 × TTL
Power Button	1
USB	2 × USB2 (Internal), 1 × USB 2.0, 1 × USB3.0
GPIO	24 × GPIO (digital I/O)
Audio	1 × MIC, 1 × Audio Out
SIM Slot	4 × SIM slots total Supports M.2 4G/5G

Storage

mSATA	2 × Full-size mSATA slots
RAID	Software RAID (OS-dependent)
SATA Speed	SATA 3.0 (6 Gb/s)

Expansion

Power Out	For External Module
TPM 2.0	Optional Security
Serial	TTL Serial Header
Watchdog	Trigger Header
mPCIe/M.2	4 × Mini PCIe*, 1 × M.2 B-key slot (4G/5G)

Power

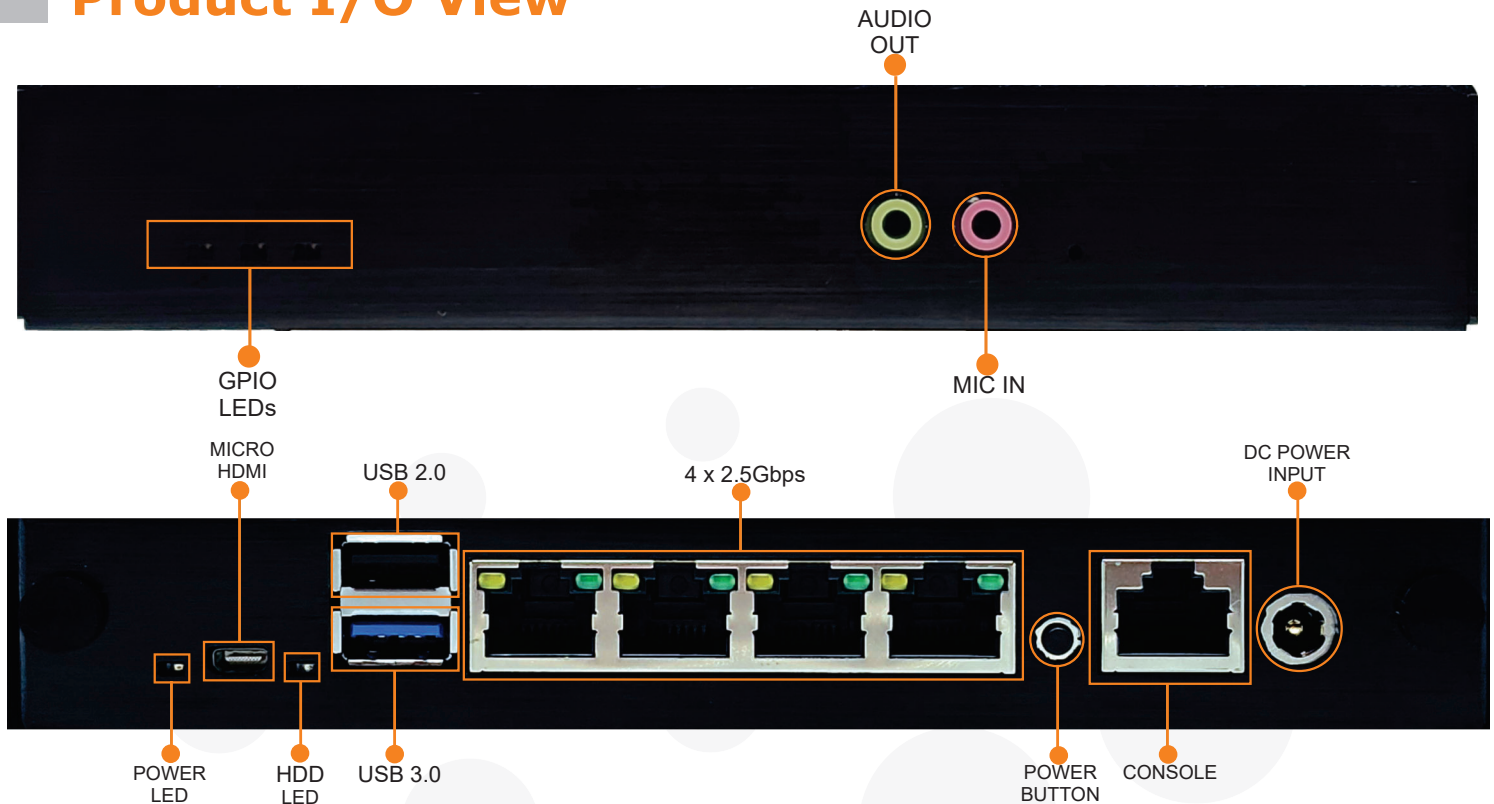
Power input	12V ±10% only
Typical Power	0.6A @ 12V (7.2W)
Max. Power	5A @ 12V (60W)

Environment

Operating	0°C ~ 60°C
Non-Operating	-40°C ~ 85°C
Opt. Humidity	Up to 95% RH @ 40°C**
Non-Opt. Humid.	Up to 95% RH @ 60°C**

* 1 x mSATA/4G LTE, 2 x Wi-Fi/4G LTE, 1 x mSATA | ** Non-condensing

Product I/O View



Package Overview

The BFT8KB is delivered as a fully assembled, ready-to-deploy network appliance built around the BFT8 industrial system board and enclosed within the BFCASET4S aluminum chassis. The system includes your selected mSATA storage option and a 12V DC power adapter (available in 2A or 5A variants depending on configuration). Designed for professional and commercial environments, the BFT8KB supports a wide range of optional integrations such as 4G/LTE and 5G modules (Mini-PCIe or M.2 B-Key), external SMA antennas, additional mSATA SSDs for redundancy or RAID, GPIO expansion modules, TPM 2.0, and custom OS or BIOS configurations. Offering robust performance, multi-WAN flexibility, and enterprise-grade reliability, the BFT8KB serves as a complete platform for firewalls, routers, VPN servers, SD-WAN nodes, IoT gateways, VoIP systems, and various edge-computing applications.

Customization

SMA Cutouts	Extra cutouts can be added if required.
Ports Labels	Custom Ports Labels can print based on requirements.
Logo	Your company logo can be printed on the system enclosure.
BIOS	Custom BIOS configurations available on bulk deployment.
OS	Custom OS pre-installed systems can ship worldwide.
Configuration	Hardware customization is available.