



QBIX-Pro-KBLB7100HD-A1

Industry's first 5G enabled embedded Industrial system with Intel® Core™ i3-7100U Processor/ Din Rail/ 2 side aluminum

Key Features

- System Size : 160W x 118D x 62.6H(mm)
- Intel® Core™ i3-7100U Processor
- Dual Channel DDR4, 2 x SO-DIMMs
- HDMI, Display port for Dual display
- 2 x GbE LAN port
- 5G module support

Application

- Industrial Automation
- Factory Automation
- HMI
- Embedded & Industrial Applications
- DVR / Surveillance

SPECIFICATION

This fanless solution already passed 5G verification of ChungHwa Telecom 5G Laboratory in Taiwan in 2020 May.

QBiX-Pro-KBLB7100HD-A1 is the first embedded system to support 5G module in the industrial market. It allows you to enjoy 5G features : **eMMB (Enhanced Mobile Broadband)**, **mMTC (Massive Machine Type Communications)**, **URLLC (Ultra-reliable and Low Latency Communications)**, to connect devices and transmit data in your operating environment without any time lag, to enhance "**smart factories**" which includes industrial automation, artificial intelligence, machine learning, and IoT applications. It covers from early supply management to logistic process in the end that it allows robots and equipments to be remotely operated, controlled and monitored with 5G network, and take necessary actions to repair or maintainance.

It is equipped with Intel® Core™ i3-7100U Processor, which provides stability and high performance for embedded system. With DIN rail mounting design and 5G mobile network, work space layout can be more flexible and well planned. It is suitable for various environments with 9V~36V wide range power input and operating temperature of 0°C~50°C. The system provides IEC 60068-2-64 vibration resistance of 5 Grms with SSD @5~500Hz, random, to meet industrial standard.

Automation QBiX-Pro-KBLB7100HD-A1

GIGAIPC Launched Industry's First 5G Enabled Embedded Computing System

Supply Management, Assembly Line, Operations Control, Robot Motion Control, Inventory Management, Delivery Management

5G Intel IoT Solutions Alliance

The diagram illustrates a 5G-enabled industrial automation system. It features a central 5G router with multiple antennas. The system is connected to various industrial components: a truck for supply management, an assembly line with robotic arms, a control room for operations control, a robotic arm for motion control, a warehouse for inventory management, and a delivery truck for delivery management. The system is powered by a 5G network, as indicated by the 5G logo and the text 'GIGAIPC Launched Industry's First 5G Enabled Embedded Computing System'. The Intel IoT Solutions Alliance logo is also present.

DIMENSION	160W x 118D x 62.6H(mm)
CPU	Intel® Core™ i3-7100U Processor 14nm, 2 cores, 4 threads 2.40 GHz, TDP 15W
MEMORY	2 x DDR4 SO-DIMM sockets, Max. Capacity 32 GB Support Dual channel DDR 2133MHz

ETHERNET	2 x GbE LAN ports (Intel® i219V and Intel® i211AT)
GRAPHIC	Integrated Graphics Processor - Intel® HD Graphics 620: 1 x HDMI2.0 port, supporting a maximum resolution of 4096x2160 @ 60Hz 1 x DP port, supporting a maximum resolution of 4096x2160 @ 60Hz (2 independent display outputs)
AUDIO	Realtek ALC269 High Definition Audio
STORAGE	1 x 2.5" HDD/SSD (SATA 6Gb/s)
EXPANSION SLOTS	1 x M.2 slot (NGFF-2230, E.key for Wifi/BT) 1 x M.2 slot (NGFF-2280, M.key, PCIe x4, SATA 6Gb/s) 1 x M.2 slot (NGFF-3052, B-Key)(Full-size mPCIe optional)
FRONT I/O	2 x RJ45 LAN ports 4 x USB 3.0 2 x USB 2.0 1 x HDMI 1 x Display Port 1 x COM port (RS-232/422/485 & RI/5V/12V) 1 x COM port (RS-232/422/485) 1 x Power switch 1 x HDD LED 1 x Headphone Jack
SIDE I/O	1 x GPIO (8 bits) 1 x 3-pin Terminal Block 5 x External Antenna Hole (Optional)
POWER	+9~36VDC Full Range
OPERATION TEMPERATURE	Operating temperature: 0°C to 50°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to 85°C Non-operating humidity: 0%-95% (non-condensing) Use wide temperature range memory and storage
VIBRATION DURING OPERATION	Operation: IEC 60068-2-64, 3 Grms, random, 5 ~ 500 Hz, 1 hr / Per Axis, With SSD/M.2 2280 Non-operation: IEC 60068-2-6, 2 G, Sine, 10 ~ 500 Hz, 1 Oct/min, 1 hr / Per Axis
SHOCK DURING OPERATION	Operation: IEC 60068-2-27, 50 G, half sine, 11 ms duration, With SSD
PACKAGING CONTENT	Box Packing Capacity: 6pcs Carton size: 416x409x333(mm) Content: TERMINAL BLOCKS MALE PLUG (25IO0-5ESDV0-D2R)
MOUNTING	DIN Rail Wall mount (Optional)

ORDER INFORMATION

6BQP7100CMR-SI