

IT70 Intel(R) Core(TM) i5 Mini-ITX Embedded PC Board

Manufacturer part number: IT70 | Embedded Board



Explore Winmate IT70, an industrial embedded board featuring Intel(R) Core(TM) i5, 170x170 resolution for OEM equipment design and embedded control.

System Specification	
Processor	Intel Core i5-1135G7 2.4GHz (up to 4.2GHz)
Memory	1 x SO-DIMM, DDR4 3200 MHz, 4GB (Default), 8GB (Optional), 16GB (Optional), 32GB (Optional), 2 x SO-DIMM, DDR4 3200 MHz, 4GB (Optional), 8GB (Optional), 16GB (Optional), 32GB (Optional), 64GB (Optional)
Storage	1 x M.2 M-Key 2280 NVMe SSD 128GB (Default), 256GB (Optional), 512GB (Optional), 1TB (Optional), 2TB (Optional), 1 x SATA III for 2.5" SSD/HDD up to 2TB (Optional)
Ethernet controller	2 x Intel(R) Ethernet Controller
Security	TPM 2.0
Operating System	Windows 11 IoT Enterprise (64 bit) (Optional), Windows 11 Pro 64 bit (Optional), Linux Ubuntu 22.04(Do not support Wake on Touch) (Optional)
WLAN	Support (Optional)
BT	Support (Optional)
IO Ports	
USB Port	4 x USB3.2 Gen2x1 (Type-A)
LAN	1 x Giga LAN RJ45 Connector, 1 x 2.5 Giga LAN RJ45 Connector
Video	1 x DP1.4 (Default), 1 x HDMI 2.0 (Optional)
Audio	Mic in, Line out
Expansion Port	1 x M.2 2280 M-Key Slot (for NVMe SSD), 1 x M.2 2230 E-Key Slot (for Wi-Fi module), 1 x PCIe 4.0 (x16) slot (x4 signal)
Power Input	1 x 12V DC, Din4 pin connector
Internal IO Ports	
Power input	1 x 6pin(1x6) for 12V DC in
Power output	2 x 2pin(1x2) red wafer for 5V DC out , 1 x 2pin(1x2) yellow wafer for 12V DC out
USB	2 x 8pin(2x4) for 4 x USB2.0
Serial port	2 x 10pin(2x5) for RS232, 2 x 10pin(2x5) for RS232/422/485,
Display	1 x 40pin DF13 connector for LVDS (Default), 1 x 40pin DF13 connector for eDP(Support the UHD, 4 lans eDP) (Optional)
Backlight	1 x 7pin(1x7) for panel backlight
WWAN Module Connector	1 x SATA III, 1 x 8pin(2x4) for SATA power, (SATAIII is only available when M.2 NVMe is not in use)

DIDO	1 x 14pin(2x7) for Digital input/output
VR	1 x 3pin(1x3) for Digital panel backlight brightness control, 1 x 3pin(1x3) VR/Software brightness switch jumper, 1 x 3pin(1x3) PWM/DC brightness switch jumper, 1 x 3pin(1x3) 3.3V/5V PWM Level switch jumper
Fan	1 x 3pin(1x3) for CPU Fan, 1 x 3pin(1x3) for System Fan
OSD	1 x 10pin(2x5) for OSD control
Speaker	2 x 2pin(1x2) for Speaker
Backup battery	1 x RTC battery holder
BIOS debug	1 x 10pin(2x5) for LPC debug
Certification	
Certification	CE, FCC
Mechanical	
Dimension	170 x 170 mm
Environment	
Operating Humidity	10% to 95% RH, Non-Condensing
Operating Temperature	0 deg C to 60 deg C
Storage Temperature	-40 deg C to 70 deg C
Accessory	
Accessory	1 x Installation Guide
Optional Accessory	1 x SATA cable (94H007Z070K0) (Optional), 1 x SATA Power cable (94HE08Z150E0) (Optional), 2 x COM cable (94G309E100E1) (Optional), 1 x 2-Port USB 2.0 Type A cable (94E808E080K0) (Optional), 1 x 12V 120W Adapter (922D120W12V4) (Optional), 1 x Power cord (Varies by country) (Optional), 1 x CPU Heatspreader with Fan(98K000A000N8) (Optional), 1 x Membrane (98K000A000N1) (Optional), 2 x Speaker (612620000007) (Optional)
Power	
Power Rating	12V DC