

# Azure Percept DK (DKSC-101)

NXP® i.MX 8M based system with Microsoft CBL-Mariner OS for Edge AI development

## Features

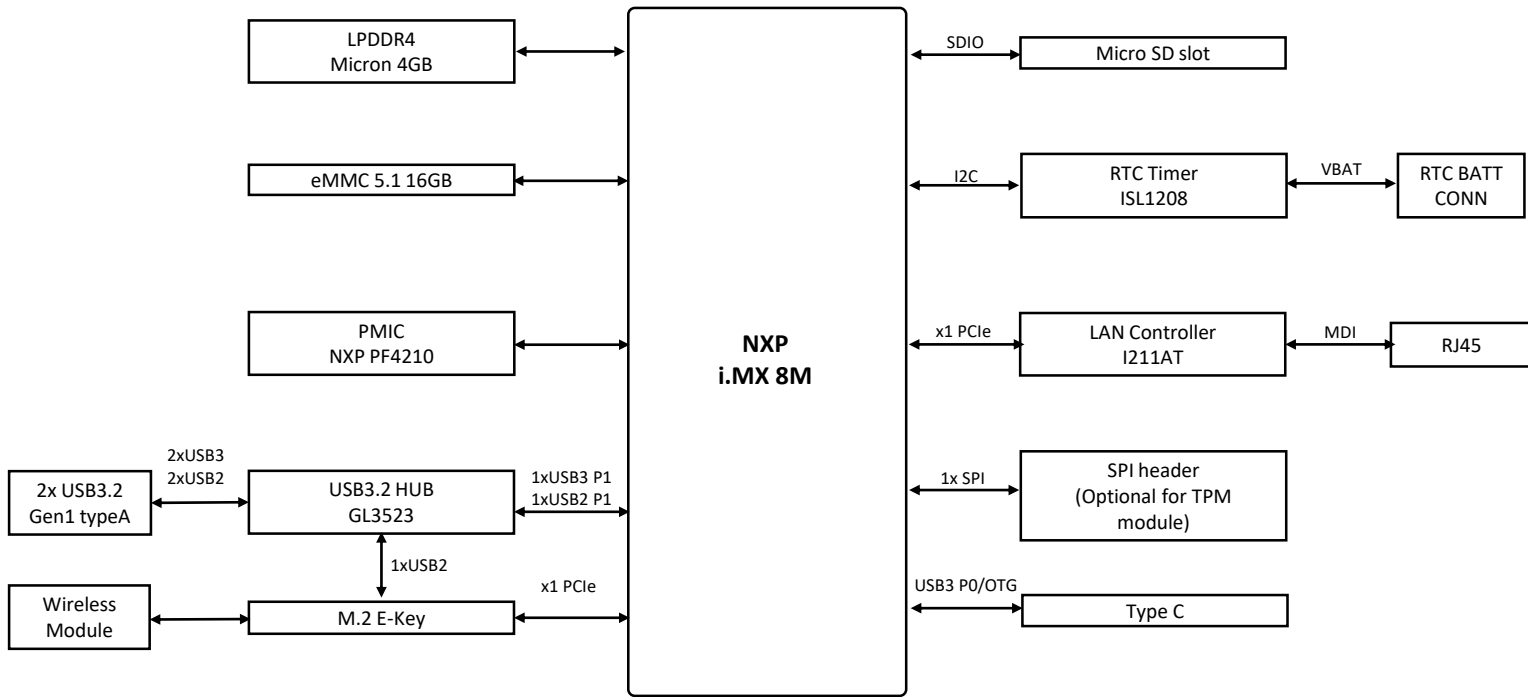
- A seamless way to deploy AI from POC to the edge
- Industrial and detachable design with 80/20 1010s mount
- Bundled with vision-enabled AI acceleration kit



## Specifications

<b>Processor System</b>	CPU	NXP® i.MX 8 M ARM Cortex-A53 core
<b>Memory</b>	Technology	4GB LPDDR4
<b>Connectivity</b>	Ethernet	1 x 10/100/1000Mbps RJ-45@Intel i211-AT
	Wireless	2x2 Dual-band Wi-Fi 5 AC/Bluetooth 5.0
<b>Storage</b>	eMMC	1 x 16GB
<b>Front I/O</b>	Ethernet	1
	USB3.2 Gen1	2@Type A 1@Type C OTG, 5V/1.5A
	Power Button	1
	Reset Button	1
<b>Rear I/O</b>	Power Connector	DC Power input thru terminal block connector
<b>Internal Connector</b>	Micro-SD Card	1 Slot
<b>Security Module</b>	TPM	TPM 2.0 power by Nuvoton NCPT 750
<b>Power</b>	Power Type	DC power input
	Voltage	12-24V DC input
<b>Operating System</b>	Linux	Microsoft CBL Mariner OS
<b>Environment</b>	Operating Temperature	0~35°C
	Non-Operating Temperature	-40~85°C
	Relative Humidity	10~95%
<b>Dimension</b>	Form Factor	Azure Percept DK: 125 x 85 x 50 mm Azure Percept Vision: 90 x 50 x 53 mm
	Camera	Azure Percept Vision
<b>Accessories</b>	USB cables	USB cable to connect Azure Percept Vision to Azure Percept DK
	Power Supply Unit	19V adaptor w/ power cord
	Antenna	2 x Wi-Fi antenna
<b>Product Weight</b>	Weight	1.25 KG

## Block Diagram



## Radio Frequency Information

Frequency Range	WLAN	2.4GHz: 2412MHz~2472MHz 5.0GHz: 5180MHz~5240MHz, 5260~5320MHz, 5500MHz~5700MHz
	Bluetooth	2042MHz~2480MHz
Transmission Power	WLAN	2412-2472 MHz: Maximum Output Power (EIRP): 20 5150-5350 MHz: Maximum Output Power (EIRP): 23 5470-5725 MHz: Maximum Output Power (EIRP): 23
	Bluetooth	2402-2480 MHz: Maximum Output Power (EIRP): 8
Modulation	WLAN	CCK, DQPSK, DBPSK for DSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT (20/40)
	Bluetooth	GFSK, $\pi/4$ -DQPSK, 8DPSK
Bandwidth	WLAN	20MHz, 40MHz, 80MHz
	Bluetooth	1MHz, 2MHz