SLK-A730 Series

Industrial 5G Edge Computing Gateway

Data Sheet

Product Overview

Product Introduction

The SLK-A730 5G Edge Computing Gateway is a high-performance communications and computing platform designed for industrial IoT and intelligent applications. It integrates 5G/4G cellular connectivity, a high-performance multicore processor, and AI edge computing capabilities. With Gigabit Ethernet, Wi-Fi, RS232/RS485, CAN, and DI/DO interfaces, it supports device connectivity, protocol conversion, data acquisition, local analytics, AI inference, and cloud communication. Real-time processing at the edge reduces network latency and cloud workload while improving system responsiveness and data security. It is ideal for smart manufacturing, machine vision, intelligent transportation, energy management, robotics, and remote monitoring.

Key Features

- ✓ *Advanced 8 nm process, 8-core 64-bit architecture, high performance, and low power consumption*
- ✓ *8 GB RAM and 64 GB eMMC as standard; built-in SATA interface for storage expansion*
- ✓ *ARM Mali-G610 MC4 GPU with dedicated 2D graphics acceleration*
- ✓ *6 TOPS NPU for a wide range of AI applications*
- ✓ *8K video encoding/decoding and 8K display output*
- ✓ *Internal expansion interfaces include MIPI, eDP, LVDS, USB, CAN, serial, and audio*
- ✓ *Four external USB 3.0 ports*
- ✓ *Two Gigabit Ethernet ports, one TF card slot, and one SIM card slot*
- ✓ *Supports 5G/4G/3G networks and regional frequency bands worldwide*
- ✓ *Supports Android and Linux operating systems*
- ✓ *Shielded internal modules ensure stable, reliable 24/7 operation*
- ✓ *12-36 VDC input with reverse-polarity and surge protection*
- ✓ *Compact all-aluminum enclosure with an efficient thermal design*
- ✓ *IP30-rated enclosure*

Specifications

Hardware Architecture	
CPU	*High-performance 8-core 64-bit CPU, advanced 8 nm process, and low power consumption* *1. Four Cortex-A76 64-bit performance cores at 2.4 GHz* *2. Four Cortex-A55 64-bit efficiency cores at 1.8 GHz*
GPU	*High-performance ARM Mali-G610 MC4 GPU with dedicated 2D graphics acceleration*
NPU	*6 TOPS computing performance; triple-core architecture; supports INT4/INT8/INT16/FP16/BF16/TF32*
RAM	*8 GB standard*
eMMC	*64 GB standard*
Storage Expansion	*64/128/256 GB options; up to 256 GB*
Built-in ROM	*4KB EEPROM*
RTC	*RTC real-time clock*
Operating System	*Android 12.0, Linux 5.10, Debian 11, Ubuntu 20.04, or Ubuntu 22.04 (default)*
External Interfaces	
USB Ports	*4 x external USB 3.0 ports*
Ethernet	*2 x 10/100/1000 Mbps Ethernet ports*
HDMI	*1 x HDMI 2.0 input; supports 4K (3840 x 2160) at 60 Hz* *1 x HDMI 2.1 output; supports 8K (7680 x 4320) at 60 Hz* *Supports H.265/H.264/AV1/VP9/AVS2 video decoding at up to 8K 60 fps* *Supports H.264/H.265 video encoding at up to 8K 30 fps*
TF Card Slot	*Supports TF cards up to 256 GB*
SIM Card Slot	*1 x standard SIM card slot*
5G Antenna Connectors	*4 x FAKRA 5G antenna connectors (5G version)*
Wi-Fi/BT Antenna Connector	*1 x FAKRA combined antenna connector for dual-band Wi-Fi 6 (2.4/5.8 GHz) and Bluetooth 5.3*
Headphone Jack	*1 x 3.5 mm headphone jack*
Power Input	*12-36 VDC input*
Power Supply	*Standard 24 VDC/2.5 A power adapter (AC input)* *If additional peripherals increase power consumption, use a power supply with a higher output rating.*

Internal Expansion Interfaces (custom enclosure required)	
USB Ports	*5 x internal USB 2.0 headers*
MIPI Camera	*30-pin FPC connector; supports 13 MP cameras*
Serial Ports	*5 x serial headers: 1 x RS232, 1 x RS485, 1 x TTL, and 2 x RS232/TTL switchable*
GPS	*Optional GNSS engine*
LVDS Output	*1 x dual-channel LVDS interface*
eDP Output	*1 x 4-lane eDP interface*
MIPI Output	*1 x 40-pin FPC connector for MIPI LCD*
Audio Output	*Built-in dual-channel power amplifier: 10 W/channel at 4 ohms or 5 W/channel at 8 ohms*

Cellular Frequency Bands

UNISOC-based 5G module, model SLK-A730-5G-A(CN), for Mainland China		
5G Chipset	*UNISOC UDX710*	
5G Standard	*3GPP Release 15*	
Band Support	*5G/4G/3G*	
5G	*Sub-6G*	*N1/28/41/78/79*
4G	*LTE-FDD*	*B1/2/3/5/7/8*
4G	*LTE-TDD*	*B34/38/39/40/41*
3G	*WCDMA*	*B1/2/5/8*
MIMO	*NR DL 4*4MIMO: N1/41/78/79，UL 2*2 MIMO: N41/78/79*	
	*LTE DL 2*2 MIMO: B1/2/3/5/7/8/34/38/39/40/41，UL 1*1 MIMO*	
5G Network Mode	*Supports both 5G SA (standalone) and NSA (non-standalone) modes*	
Theoretical Data Rate	• *NR SA: Max. 1.92 Gbps DL / 750 Mbps UL* • *NR NSA: Max. 2 Gbps DL / 340 Mbps UL* • *LTE+: Max. 500Mbps DL / Max.150 Mbps UL* • *WCDMA: 42Mbps(DL) / 11Mbps(UL)* *Values shown are theoretical. Actual speeds depend on the local network environment and SIM service plan.*	
Transmit Power	*Class 3(23.5dBm±1.5dB)for WCDMA bands* *Class 3(23dBm±1.5dB)for LTE bands* *Class 3(23dBm±1.5dB)for NR Sub6 bands* *Class 2(26dBm±1.5.dB)for B41/n41/78/79 bands*	
Number of 5G Modules	*1 x built-in 5G module*	
GNSS	*The UNISOC 5G module does not support GPS/GLONASS/Galileo/BeiDou/QZSS*	
Antenna Connector Definitions	*ANT0-5G-MAIN: Primary antenna (Tx/Rx)* *ANT1-5G-DIV: Diversity receive antenna (Rx)* *ANT2-5G-MIMO1: MIMO 1 antenna (Rx)* *ANT3-5G-MIMO2: MIMO 2 antenna (Tx/Rx)*	

HiSilicon-based 5G module, model SLK-A730-5G-B(CN), for Mainland China		
5G Chipset	*HiSilicon*	
5G Standard	*3GPP Release 16*	
Band Support	*5G/4G/3G*	
5G	*Sub-6G*	*N1/N3/N5/N8/N28/N41/N78/N79*
4G	*LTE-FDD*	*B1/3/5/8*
4G	*LTE-TDD*	*B34/38/39/40/41*
3G	*WCDMA*	*B1/8*
MIMO	*NR DL 4*4MIMO: N1/N3/N41/N78/N79* *UL:2x2 MIMO：N41/N78/N79*	
	LTE DL/UL:CAT18	
5G Network Mode	*Supports both 5G SA (standalone) and NSA (non-standalone) modes*	
Theoretical Data Rate	• *5G: Max. 4Gbps DL / Max. 1.5Gbps UL* • *LTE+: Max. 900bps DL / Max. 200Mbps UL* • *WCDMA: Max. 42Mbps DL / Max. 5.76Mbps UL* *Values shown are theoretical. Actual speeds depend on the local network environment and SIM service plan.*	
Transmit Power	*Class 3(23.5dBm±1.5dB)for WCDMA bands* *Class 3(23dBm±1.5dB)for LTE bands* *Class 3(23dBm±1.5dB)for NR Sub6 bands* *Class 2(26dBm±1.5.dB)for B41/n41/77/78/79 bands*	
Number of 5G Modules	*1 x built-in 5G module*	
Antenna Connector Definitions	*ANT0-5G-MAIN: Primary antenna (Tx/Rx)* *ANT1-5G-DIV: Diversity receive antenna (Rx)* *ANT2-5G-MIMO1: MIMO 1 antenna (Rx)* *ANT3-5G-MIMO2: MIMO 2 antenna (Tx/Rx)*	

Qualcomm-based 5G module, model SLK-A730-5G(AE), Europe/Asia/Australia version for most countries		
5G Chipset	*Qualcomm SDX62*	
5G Standard	*3GPP Release 16*	
Band Support	*5G/4G/3G*	
5G	*Sub-6G*	***N1/ 3/ 5/ 7/ 8/ 20/ 28/ 38/ 40/ 41/ 71/ 75/ 76 /77/ 78***
4G	*LTE-FDD*	*B1/B3/B5/B7/B8/B20/B28/B32*
4G	*LTE-TDD*	*B38/B40/B41/B42/B43*
3G	*WCDMA*	*B1//5/8*
MIMO	*NR DL 4*4MIMO: N1/ 3/ 7/ 38/ 40/ 41/ 77/ 78*	
	*NR UL 2*2MIMO: N38/ 40/ 41/ 77/ 78*	
5G Network Mode	*Supports both 5G SA (standalone) and NSA (non-standalone) modes*	
Theoretical Data Rate	• *NR SA: Max. 2.5 Gbps DL / 900 Mbps UL* • *NR NSA: Max. 3.5 Gbps DL / 555 Mbps UL* • *LTE+: Max. 1.6Gbps DL / Max. 211Mbps UL* • *WCDMA: Max. 42Mbps DL / Max. 5.76Mbps UL* *Values shown are theoretical. Actual speeds depend on the local network environment and SIM service plan.*	
Transmit Power	*Class 3(23.5dBm±1.5dB)for WCDMA bands* *Class 3(23dBm±1.5dB)for LTE bands* *Class 3(23dBm±1.5dB)for NR Sub6 bands* *Class 2(26dBm±1.5.dB)for B41/n41/77/78/79 bands*	
Number of 5G Modules	*1 x built-in 5G module and 1 x external dual-Nano-SIM combo slot* *Optional internal eSIM*	
GNSS	*GPS/GLONASS/Galileo/BeiDou/QZSS (provided by the 5G module); shares the 5G antenna*	
Antenna Connector Definitions	*ANT0-5G-MAIN: Primary antenna (Tx/Rx)* *ANT1-5G-DIV: Diversity receive antenna (Rx)* *ANT2-5G-MIMO1: MIMO 1 antenna (Rx)* *ANT3-5G-MIMO2: MIMO 2 antenna (Tx/Rx)*	

Qualcomm-based 5G module, model SLK-A730-5G(NA), for North America		
5G Chipset	*Qualcomm SDX62*	
5G Standard	*3GPP Release 16*	
Band Support	*5G/4G/3G*	
5G	*Sub-6G*	***N2/ 5/ 7/ 12/ 13/ 14/ 25/ 26/ 29/ 30/ 38/ 41/ 48/ 66/ 70/ 71/ 77/ 78***
4G	*LTE-FDD*	*B2/B4/B5/B7/B12/B13/B14/B17/ B25/B26/B29/B30/B66/B71*
4G	*LTE-TDD*	*B38/B41/B42/B43/B46 (LAA) / B48*
3G	*WCDMA*	*-*
MIMO	*NR DL 4*4MIMO: N2/ 5/ 7/ 12/ 13/ 14/ 25/ 26/ 29/ 30/ 38/ 41/ 48/ 66/ 70/ 71/ 77/ 78*	
	*NR UL 2*2MIMO: N38/ 41/ 48/ 77/ 78*	
5G Network Mode	*Supports both 5G SA (standalone) and NSA (non-standalone) modes*	
Theoretical Data Rate	*• NR SA: Max. 2.5 Gbps DL / 900 Mbps UL* *• NR NSA: Max. 3.5 Gbps DL / 555 Mbps UL* *• LTE+: Max. 1.6Gbps DL / Max. 211Mbps UL* *• WCDMA: Max. 42Mbps DL / Max. 5.76Mbps UL* *Values shown are theoretical. Actual speeds depend on the local network environment and SIM service plan.*	
Transmit Power	*Class 3(23.5dBm±1.5dB)for WCDMA bands* *Class 3(23dBm±1.5dB)for LTE bands* *Class 3(23dBm±1.5dB)for NR Sub6 bands* *Class 2(26dBm±1.5.dB)for B41/n41/77/78/79 bands*	
Number of 5G Modules	*1 x built-in 5G module and 1 x external dual-Nano-SIM combo slot* *Optional internal eSIM*	
GNSS	*GPS/GLONASS/Galileo/BeiDou/QZSS (provided by the 5G module); shares the 5G antenna*	
Antenna Connector Definitions	*ANT0-5G-MAIN: Primary antenna (Tx/Rx)* *ANT1-5G-DIV: Diversity receive antenna (Rx)* *ANT2-5G-MIMO1: MIMO 1 antenna (Rx)* *ANT3-5G-MIMO2: MIMO 2 antenna (Tx/Rx)*	

Qualcomm-based 5G module, model SLK-A730-5G(GL), for worldwide use		
5G Chipset	Qualcomm SDX62	
5G Standard	3GPP Release 16	
Band Support	5G/4G/3G	
5G	Sub-6G SA/NSA	N1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/ 79
4G	LTE-FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 29/ 30/ 32/ 66/ 71
	LTE-TDD	B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48
	LAA	B46
3G	WCDMA	B1/ 2/ 4/ 5/ 8/ 19
MIMO	NR DL 4*4MIMO: N1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 75/ 76/ 77/ 78/79	
	NR UL 2*2MIMO: 38/n41/n48/n77/n78/n79	
5G Network Mode	Supports both 5G SA (standalone) and NSA (non-standalone) modes	
Theoretical Data Rate	• NR SA: Max. 2.5 Gbps DL / 900 Mbps UL • NR NSA: Max. 3.5 Gbps DL / 555 Mbps UL • LTE+: Max. 1.6Gbps DL / Max. 211Mbps UL • WCDMA: Max. 42Mbps DL / Max. 5.76Mbps UL Values shown are theoretical. Actual speeds depend on the local network environment and SIM service plan.	
Transmit Power	Class 3(23.5dBm±1.5dB)for WCDMA bands Class 3(23dBm±1.5dB)for LTE bands Class 3(23dBm±1.5dB)for NR Sub6 bands Class 2(26dBm±1.5.dB)for B41/n41/77/78/79 bands	
Number of 5G Modules	1 x built-in 5G module	
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS (provided by the 5G module); shares the 5G antenna	
Antenna Connector Definitions	ANT0-5G-MAIN: Primary antenna (Tx/Rx) ANT1-5G-DIV: Diversity receive antenna (Rx) ANT2-5G-MIMO1: MIMO 1 antenna (Rx) ANT3-5G-MIMO2: MIMO 2 antenna (Tx/Rx)	

Physical Specifications

Operating Temperature	Storage temperature: -40 ° C to +95 ° C
	Operating temperature: -20 ° C to +70 ° C
Relative Humidity	95%
Dimensions	L x W x H: 180 x 116 x 44 mm (excluding mounting brackets)
Mounting	Wall mounting with mounting brackets
Weight	Net weight: 830 g
	Gross weight: 1.5 kg
Certifications	CE, FCC, RHOS

Additional Information

Warranty	2 years

Ordering Information

Model	
SLK-A730-5G-A(CN)	UNISOC 5G module; frequency bands for Mainland China Standard accessories: 4 x 5G FAKRA stick antennas + 1 x FAKRA Wi-Fi antenna 1 x 1.5 m RJ45 Ethernet cable 1 x 24 VDC/2.5 A power adapter
SLK-A730-5G-B(CN)	HiSilicon 5G module; frequency bands for Mainland China Standard accessories: 4 x 5G FAKRA stick antennas + 1 x FAKRA Wi-Fi antenna 1 x 1.5 m RJ45 Ethernet cable 1 x 24 VDC/2.5 A power adapter
SLK-A730-5G-(AE)	Qualcomm 5G module; frequency bands for Europe, Asia, Australia, and other regions Standard accessories: 4 x 5G FAKRA stick antennas + 1 x FAKRA Wi-Fi antenna 1 x 1.5 m RJ45 Ethernet cable 1 x 24 VDC/2.5 A power adapter
SLK-A730-5G-(NA)	Qualcomm 5G module; frequency bands for North America Standard accessories: 4 x 5G FAKRA stick antennas + 1 x FAKRA Wi-Fi antenna 1 x 1.5 m RJ45 Ethernet cable 1 x 24 VDC/2.5 A power adapter
SLK-A730-5G-(GL)	Qualcomm 5G module; frequency bands for Global Area Standard accessories: 4 x 5G FAKRA stick antennas + 1 x FAKRA Wi-Fi antenna 1 x 1.5 m RJ45 Ethernet cable 1 x 24 VDC/2.5 A power adapter

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