Armadillo-IoT G3

Hardware specifications

Development set

Model number	AGX3140-D20Z
Product name	Armadillo IoT Gateway G3 M1-M Model Development Kit *3-carrier compatible version with WLAN combo ax
CPU	NXP Semiconductors i.MX 7 Dual Arm Cortex-A7 (996MHz) Dual Core
RAM	1GB (DDR3L-1066)
ROM	3.8GB (eMMC)[※1]
LAN	RJ45 x 1 (1000BASE-T/100BASE-TX/10BASE-T, AUTO-MDIX compatible)
Wireless LAN module	WLAN + BT Combo Module[※2] IEEE 802.11 a/b/g/n/ac/ax
Mobile communication	LTE Cat.4[※3] SIM slot: Supports micro SIM cards[※4]
USB	USB 2.0 (Host) x 1 (High Speed)
SD/MMC	SD card slot x 1
Calendar Clock	Equipped with RTC[※5](Backup function supported *when backup battery is connected)
switch	User switches x 3, Reset switch x 1
LED	User LEDs x 4, WWAN LED x 1
Input power	DC 8V to 26.4V
Power consumption (reference value)	Approx. 3.4W (standby), Approx. 6.2W (LAN, WLAN, 3G communication)[※6], Approx. 6.6W (when communicating with LAN, WLAN, LTE)[※6]
Operating temperature range	-10 to +60℃ (Substrate only: -20 to +70℃)[※7][※8]
Expansion interface	Up to 2 add-on modules can be installed.
Maintenance port	Debug serial interface[※9]
Secure element	Equipped with NXP Semiconductors SE050 chip.
Casing size	125.0 (length including flange: 155.8) × 125.8 × 47.0 mm[※10]

[※1] Operates in pSLC mode.
[※2] Equipped with an onboard antenna.
[※3] An external antenna must be connected when using mobile communication.
[※4] Compatible with SIM cards (sold separately) that support 3G and LTE areas.
[※5] Usable when a backup battery (sold separately) is connected.
[※6] Power consumption varies depending on the 3G/LTE radio wave environment.
[※7] However, no condensation.
[※8] Ambient temperature when power consumption is saved, such as by stopping communication of the 3G/LTE module at high temperatures.
[※9] Can be connected to a PC using a USB serial conversion adapter.
[※10] Dimensions excluding protrusions.

For other development kits, please see the link below.

- Development kit (AGX3140-D00Z, AGX3142-D00Z, AGX3144-D00Z, AGX3146-D00Z)

Mass production version (with LTE)

Model number	AGX3140-C23Z	AGX3142-C23Z	AGX3140-C02Z
Product name	Armadillo IoT Gateway G3 M1-M Model for Mass Production (LTE equipped, LTE antenna set included, WLAN combo with ax, WLAN board antenna included) *Compatible with 3 carriers	Armadillo IoT Gateway G3 M1-D Model for Mass Production (LTE equipped, LTE antenna set included, WLAN combo with ax, WLAN board antenna included) *NTT Docomo compatible version	Armadillo IoT Gateway G3 M1-M Model for Mass Production (LTE equipped, LTE antenna set included, WLAN combo not included) *Compatible with 3 carriers
CPU	NXP Semiconductors i.MX 7 Dual Arm Cortex-A7 (996MHz) Dual Core		
RAM	1GB (DDR3L-1066)		
ROM	3.8GB (eMMC)[※1]		
LAN	RJ45 x 1 (1000BASE-T/100BASE-TX/10BASE-T, AUTO-MDIX compatible)		
Wireless LAN module	WLAN + BT Combo Module[※2] IEEE 802.11 a/b/g/n/ac/ax		Not included
Mobile communication	LTE Cat.4[※3] SIM slot: Supports micro SIM cards[※4]		
USB	USB 2.0 (Host) x 1 (High Speed)		
SD/MMC	SD card slot x 1		
Calendar Clock	Equipped with RTC[※5](Backup function supported *when backup battery is connected)		
switch	User switches x 3, Reset switch x 1		
LED	User LEDs x 4, WWAN LED x 1		
Input power	DC 8V to 26.4V		
Power consumption (reference value)	Approx. 3.4W (standby), Approx. 6.2W (LAN, WLAN, 3G communication)[※6], Approx. 6.6W (when communicating with LAN, WLAN, LTE)[※6]		Approx. 3.4W (standby), approx. 5.8W (LAN, WLAN, 3G communication)[※6], Approx. 6.2W (when communicating with LAN, WLAN, LTE)[※6]
Operating temperature range	-10 to +60℃ (Substrate only: -20 to +70℃)[※7][※8]		
Expansion Interface	Up to 2 add-on modules can be installed.		
Maintenance port	Debug serial interface[※9]		
Casing size	125.0 (length including flange: 155.8) × 125.8 × 47.0 mm[※10]		

[※1] Operates in pSLC mode.
[※2] Equipped with an onboard antenna.
[※3] An external antenna must be connected when using mobile communication.
[※4] Compatible with SIM cards (sold separately) that support 3G and LTE areas.
[※5] Usable when a backup battery (sold separately) is connected.
[※6] Power consumption varies depending on the 3G/LTE radio wave environment.
[※7] However, no condensation.
[※8] Ambient temperature when power consumption is saved, such as by stopping communication of the 3G/LTE module at high temperatures.
[※9] Can be connected to a PC using a USB serial conversion adapter.
[※10] Dimensions excluding protrusions.

For other mass-production models (with LTE or 3G), please see the link below.

- Mass production models *LTE equipped (AGX3140-C03Z, AGX3142-C03Z, AGX3144-C03Z, AGX3146-C03Z, AGX3142-C02Z, AGX3144-C02Z, AGX3146-C02Z)
- Mass production models *3G equipped (AGX3120-C03Z, AGX3020-C03Z, AGX3120-C02Z, AGX3020-C02Z)

For mass production (without mobile communication module)

Model number	AGX3101-C21Z	AGX3101-C00Z
Product name	Armadillo-IoT Gateway G3 for Mass Production (1GB memory, no LTE, WLAN combo with ax, WLAN board antenna included)	Armadillo IoT Gateway G3 for Mass Production (LTE and WLAN Combo not included)
CPU	NXP Semiconductors i.MX 7 Dual Arm Cortex-A7 (996MHz) Dual Core	
RAM	1GB (DDR3L-1066)	
ROM	3.8GB (eMMC)[※1]	
LAN	RJ45 x 1 (1000BASE-T/100BASE-TX/10BASE-T, AUTO-MDIX compatible)	
Wireless LAN module	WLAN + BT Combo Module[※2] IEEE 802.11 a/b/g/n/ac/ax	Not included
Mobile communication	Not included	
USB	USB 2.0 (Host) x 1 (High Speed)	
SD/MMC	SD card slot x 1	
Calendar Clock	Equipped with RTC[※3](Backup function supported *when backup battery is connected)	
switch	User switches x 3, Reset switch x 1	
LED	User LEDs x 4, WWAN LED x 1	
Input power	DC 8V to 26.4V	
Power consumption (reference value)	Approx. 3.1W (standby), Approx. 6.2W (LAN, WLAN communication)	Approximately 2.2W (standby), approximately 2.4W (LAN communication)
Operating temperature range	-10 to +60℃ (Substrate only: -20 to +70℃)[※4]	
Expansion Interface	Up to 2 add-on modules can be installed.	
Maintenance port	Debug serial interface[※5]	
Casing size	125.0 (length including flange: 155.8) × 125.8 × 47.0 mm[※6]	

[※1] Operates in pSLC mode.
[※2] Equipped with a circuit board antenna.
[※3] Can be used when a backup battery (sold separately) is connected.
[※4] However, condensation must not occur.
[※5] Can be connected to a PC using the included USB serial conversion adapter.
[※6] Dimensions exclude protrusions.

For other mass-production models (without mobile communication modules), please see the link below.

- For mass production (AGX3101-C01Z, AGX3000-C01Z, AGX3000-C00Z)

Case exterior

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inquiry

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