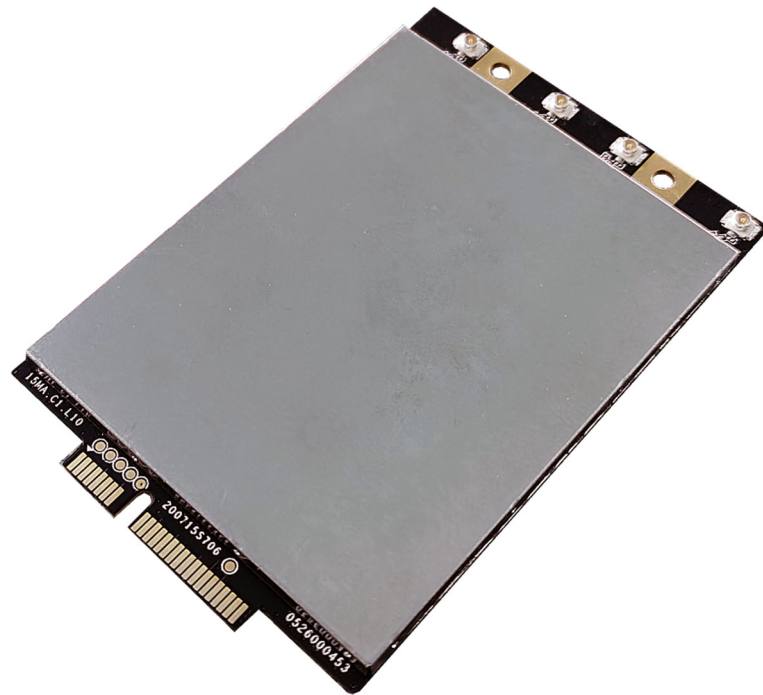




GLOBAL TELECOM
WE ENGINEER CONNECTIVITY



Global-7243A4x4CB

Cat12 LTE Module
Quick User Guide V1.0

List of applicable FCC rules

FCC Part 22; FCC Part 24E; FCC Part 27

Specific operational use conditions

This product is a Limited Single Modular transmitter; the module may be operated only with the antenna with which it is authorized. Any antenna that is of the same type and of equal or less directional gain as an antenna that is authorized with the intentional radiator may be marketed with, and used with, that intentional radiator.

Limited module procedures

Global Telecom Corp will retain control over the final installation of the modular such that compliance of the end product is assured. In such cases, an operating condition on the limit modular approval for the module must be only approved for use when installed in devices produced by a specific manufacturer. If any hardware modify or RF control software modify will be made by host manufacturer. C2PC or new certificate should be apply to get approval, if those change and modification made by host manufacturer not expressly approved by the party responsible for compliance, then it is illegal.

Trace antenna designs

This product has four External Antennas. Not applicable.

RF exposure considerations

This equipment complies with the FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and any part of your body.

Antennas

This module is for use with external antennas only, and the antenna is recommended as below:

| No. | Antenna Type | Model | Frequency Range(MHz) | Gain |
|-----|--------------|----------------|----------------------|------|
| 1 | PCB antenna | 33V_ANT_F07F38 | 1850-1910MHz | 4dBi |
| | | | 1710-1755MHz | 5dBi |
| | | | 824-849MHz | 2dBi |
| | | | 699-716MHz | 2dBi |
| | | | 777-787MHz | 2dBi |
| | | | 704-716MHz | 2dBi |
| | | | 1850-1915MHz | 4dBi |
| | | | 814-849MHz | 2dBi |
| | | | 2496-2690MHz | 4dBi |
| | | | 1710-1780MHz | 4dBi |
| | | | 663-698MHz | 1dBi |

Label and compliance information

FCC ID label on the final system must be labeled with "Contains FCC ID: S3KG7243A4CB" or "Contains transmitter module FCC ID: S3KG7243A4CB".

Information on test modes and additional testing requirements

Contact Global Telecom Corp will provide stand-alone modular transmitter test mode. Additional testing and certification may be necessary when multiple modules are used in a host.

Additional testing, Part 15 Subpart B disclaimer

To ensure compliance with all non-transmitter functions the host manufacturer is responsible for ensuring compliance with the module(s) installed and fully operational. For example, if a host was previously authorized as an unintentional radiator under the Supplier's Declaration of Conformity procedure without a transmitter certified module and a module is added, the host manufacturer is responsible for ensuring that after the module is installed and operational the host continues to be compliant with the Part 15B unintentional radiator requirements. Since this may depend on the details of how the module is integrated with the host, Global Telecom Corp shall provide guidance to the host manufacturer for compliance with the Part 15B requirements.

FCC Warning

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE 1: Any changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance.

Note 1: This module certified that complies with RF exposure requirement under mobile or fixed condition, this module is to be installed only in mobile or fixed applications.

A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal computer, are considered to be mobile devices if they meet the 20 centimeter separation requirement.

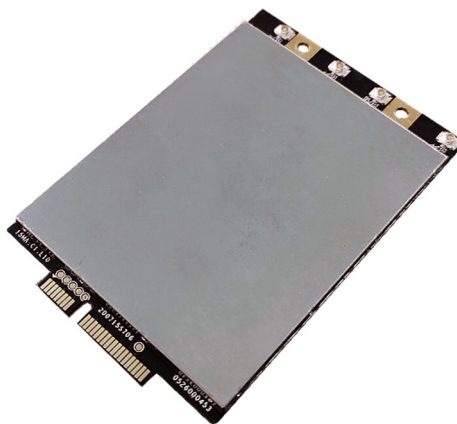
A fixed device is defined as a device is physically secured at one location and is not able to be easily moved to another location.

Note 2: Any modifications made to the module will void the Grant of Certification, this module is limited to OEM installation only and must not be sold to end-users, end-user has no manual instructions to remove or install the device, only software or operating procedure shall be placed in the end-user operating manual of final products.

Note 3: Additional testing and certification may be necessary when multiple modules are used.

1. Overview

The Global7243A is an advanced multi-band CAT12 LTE PCIe mini card product developed by Global Telecom for embedded LTE module market. It supports standard PCI-E and USB 2.0 & 3.0 interfaces and can be easily integrated into laptop, set-top box and real time industry devices to provide instant advanced 4G broadband communication capability.



1.1. User Interface Specification

| Model | Description & User Interface |
|--------------------------|---|
| Global-7243A4x4CB | <ul style="list-style-type: none">- Dimension 74mm * 50mm * 5.2mm- IPEX-1 Connectors (4)- PCI-E DC 4.2~5.0V- Weight: <50g- Operating Temperature: -30°C to 55°C- Storage Temperature: -40°C to 85°C |

1.2. LTE Interface Specification

| | |
|-----------------|-----------------------------------|
| Frequency Bands | Band2/4/5/12/13/17/25/26/41/66/71 |
| Radio Access | 3GPP LTE Release 12 |
| Operation Mode | TDD or FDD, 8RX, 2TX, DL MIMO |
| Output Power | 23dBm |
| Throughput | Category 12 |

2. Managing LTE Module

2.1 WEB Login

User can access the dongle management GUI using a Web browser from a local PC connected to device LAN port. The user should ensure that the connected PC have acquired IP address via DHCP from the device. After IP connectivity is established between the PC and LTE Module, the user may launch a Web browser and specify `http://192.168.0.1` in the address bar, the default home page will appear.

Global Telecom Global-7243A4x4CB

This device is designed to enable quick and portable access to Internet. The WEB GUI is provided for user to quickly view operation status and configure necessary device setting.

Thank you for choosing our product and enjoy the convenience it offers!

2.2 System configuration

■ Network Information

This page is showing the device network information and the user can change the network interface config.

System Information

» Interfaces

| Name | MAC | IP | NETMASK | Status | MTU |
|----------|-----|---------|---------|--------|------|
| lte0pdn0 | | 0.0.0.0 | 0.0.0.0 | DOWN | 1500 |

» Gateway, Route, DNS

| | | | |
|-----------------|--------------|---------------|--|
| Default Gateway | | Primary DNS | |
| Client IP | 192.168.0.71 | Secondary DNS | |

■ Maintenance

This page allows user to update the device firmware version, rest the device to factory setting and reboot the device.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

Maintenance

» IP Passthrough

Mode

» Device Local Software Build Update

Filename No file chosen

Status

Note: Upgrade file should have the PRG file extension.

» Remote Software Build Update(FOTA)

Status

» Factory Reset

Reset all settings to factory default values

» Reboot the system

It takes about 45 seconds to reboot the system

2.3 LTE configuration

■ LTE Information

This page showing the LTE information.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

LTE Information

» LTE Information

| | | | |
|----------|--|----------------|--|
| Firmware | | IMEI | |
| IMSI | | ICC ID | |
| Hardware | | Software Build | |

» LTE Status

| | | | |
|------------------|------------|------------------|---------------------------|
| UICC State | UICC Ready | Connection | |
| PDN Type | | Connection Time | |
| IPv4 Address | N/A | IPv6 Address | N/A |
| PLMN Search | Success | MCC | |
| PLMN Selected | | MNC | |
| Physical CELL ID | 134 | CellGlobalID | |
| MeanRSSI | -57 | RSSI | -56.9/-96.8/-59.8/-95.1 |
| MeanRSRP | -83 | RSRP | -83.2/-131.4/-86.2/-126.9 |
| MeanRSRQ | -6.0 | RSRQ | -6.4/-15.5/-6.4/-12.1 |
| SINR | 17 | Band | 42 |
| EARFCN | 42595 | BandWidth | 20MHZ |
| MeanTXPower | N/A | TxPower | N/A |
| ServCellState | RRC IDLE | Roaming State | |
| TM Mode | N/A | Rx/Tx Modulation | N/A |
| Rx Throughput | | Tx Throughput | |

» LTE Statistics

| | | | |
|------------|---|------------|---|
| Rx packets | 0 | Tx packets | 0 |
| Rx bytes | 0 | Tx bytes | 0 |

■ LTE Setting

This page allows user to configure the LTE setting.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

LTE Setting

» LTE Reconnect

Reconnect

» Roaming

Mode Disable Enable

Caution: When Roaming is enabled, additional charges may apply!

Apply

» LTE APN

| index | APN Name | IP Type | Auth |
|-------|-------------------|---------|------|
| 1 | fast.t-mobile.com | IPv4 | PAP |

» Support Band

| Index | Num of Value | Band |
|-------|--------------|--------------|
| 1 | 5 | 1,3,20,42,43 |

■ SIM PIN

The SIM card menu is used to view the SIM card status.

System

System Info

Maintenance

LTE

Status

Setting

SIM PIN

LTE SIM PIN

» PIN Information

| | |
|-------------|--------------|
| PIN Status | PIN DISABLED |
| RETRIES PIN | 3 |
| RETRIES PUK | 10 |

Refresh

3. Troubleshooting

Q1: My PC cannot connect to the LTE Module.

- Check whether the module and the device MINI-PCIE socket are correctly connected.

Q2: My CPE networking is not working properly.

- Check and make sure you are within LTE coverage.

Q3: Unable to connect internet while the device is already connected to LTE network.

- Check the PC's network interface configuration