

# MIC-3954 D&E Carrier Board

## 3U CompactPCI® Quad Mini PCIe & M.2 Carrier Board



### Features

- 3U Height CompactPCI Serial interface peripheral board
- Quad M.2 module carrier
- Quad Mini PCIe module carrier
- PICMG CPCI-S.0 CompactPCI® Serial Spec
- No RED Certification



### Introduction

The MIC-3954 series is a carrier board compliant CPCI-S.0 standard to support two kinds of functions by BOM option. It is routed by PCIe and USB2.0/3.0 interface to mini PCIe or M.2 connectors. It allows users to use different types of Mini PCIe or M.2 form factor modules like Wifi/3G/4G/LTE/GPS/BT, even 5G per user request, either in full or half-size style with six SMA antenna connector holes to front panel and three additional on-board SIM holders reserved. It can be installed into any peripheral slot of a CompactPCI® Serial backplane.

Option 1 serves as a quad USB type M.2 card carrier to support up to three 4G LTE modules as B/M key in 3042 form factor. An additional socket is provided for an A/E key wifi module in 2230 form factor for MIMO operation.

Option 2 serves as a quad USB/PCI Express® type Mini card carrier to support up to four Mini PCIe modules such as WiFi (WLAN) or 4G/LTE (WWAN), GPS, etc.

The MIC-3954 carrier boards are assembled an aluminum heat sink to improve unit heat dissipation, which makes it to become an ideal 4G/5G solution in railway or other harsh environment.





### Specifications

		MIC-3954D Quad M.2 Carrier	MIC-3954E Quad Mini PCIe Carrier
Backplane Interface		PCIe Gen2	PCIe Gen2
Power		+12 V, Power consumption depending on plugged module, 0.1A w/o module	
Environment		Operating	Non-Operate
	Temperature	-40 ~ 70 °C (-40 ~ 158 °F)	-40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	95% @ 40 °C, non-condensing	95% @ 40 °C, non-condensing
	Vibration (5~500 Hz)	2.0 Grms (With SSD)	
Physical Characteristics	Dimensions	160.00 x 100.00 mm (6.30" x 3.95")	
	Weight	0.5 kg	
Compliance		PICMG CPCI-S.0	

### Ordering Information

P/N List	Description	CPU board	Enclosure	Module
MIC-3954E1-S1E	MIC-3954E, 3U CPCI-Serial, quad Mini-PCIe Carrier board	MIC-3332 Series	MIC-3023 Series	Wifi/BT/3G/LTE/GPS Module, etc
MIC-3954D1-S1E	MIC-3954D, 3U CPCI-Serial, quad M.2 Carrier board			

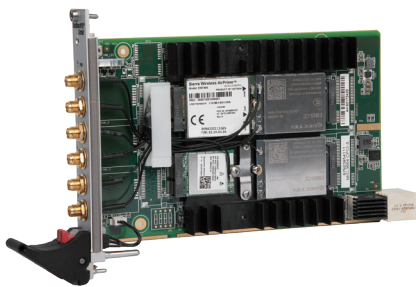
## Accessories

Module Type	Module P/N	Description
WIFI+BT Module 	EWM-W163M201E	802.11ac/a/b/g/n, QCA6174A-5, 2T2R, M.2 Module with BT4.2
LTE Module 	EM05-CE	LTE Cat 4 M.2 Module
WIFI+BT Module 	EWM-W157H01E	802.11 a/b/g/n/ac, RTL8821AE, MiniPCle Module with BT4.0
LTE Module 	QUECTEL EC20	LTE Cat4 MiniPCle Module

Notes: Please find more accessory lists or information from Advantech website: <http://www.advantech.com.cn/>

## Front View

**MIC-3954D1-S1E (Assembled w./ M.2 module)**



**MIC-3954E1-S1E (Assembled w./ Mini PCle module)**

