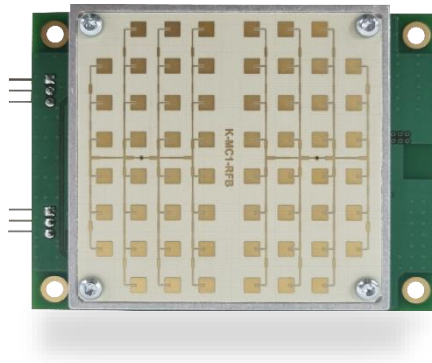


Approval Sheet

(ver1.0)

Product : KV-M100



Designed	CHECKED	APPROVAL
2021. 09. 30	2022. .	2022. .

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1. Overview

- Features

- ✓ 24GHz Continuous Wave Radar transceiver
- ✓ About 150meter detection range
- ✓ Beam aperture : 25°/12°
- ✓ RF module size : 65*65*6(mm)
- ✓ Digital board size : 87*67*15(mm)
- ✓ Weight : 72 (g)
- ✓ Supply voltage/current : 12V / 80mA
- ✓ Interface : RS-232 / RS-485

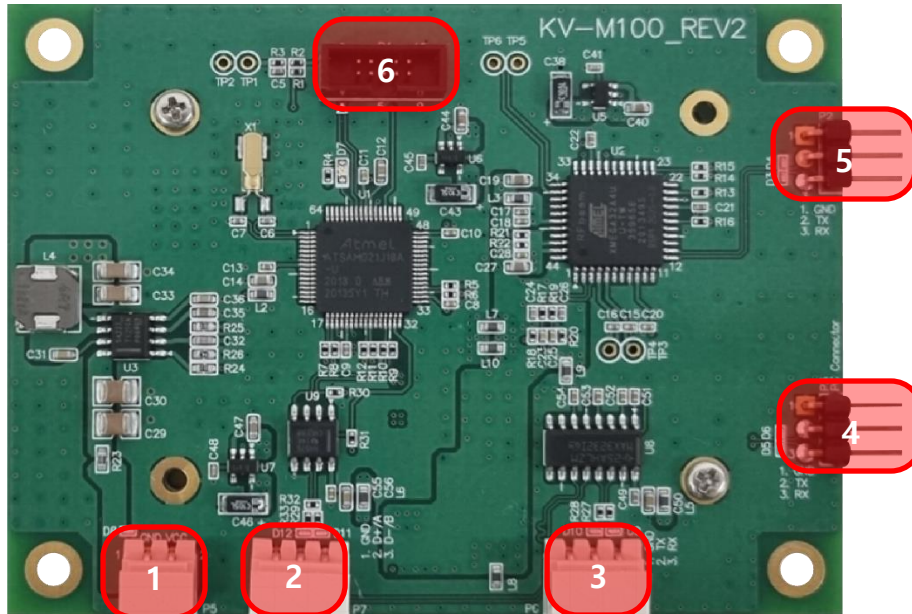
- Application

- ✓ DFS system
- ✓ Velocity measurement
- ✓ (Moving)Object detection

2. Specification

Parameter	Min	Typ	Max	unit
frequency	24.050	24.150	24.250	GHz
EIRP	+16	+18	+20	dBi
sensitivity		-122		dBm
Horizontal -3dB beamwidth		12		°
Vertical -3dB beamwidth		25		°
Digital interface	UART, RS-232 / RS-485			
Supply Voltage		12		V
Supply current	65	75	80	mA
dimensions	87 x 67 x 15			mm
weight		72		g
Operating Temp	-20		+85	°C
Accuracy		±1		Km/h

3. Interface



- (1) Power IN : 12 V
- (2) RS-485 : 9,600 Baud
- (3) RS-232 : 38,400 Baud
- (4) PC Connector_UART : 115,200 Baud
- (5) Scope_UART : 460,800 baud
- (6) ISP downloader

3.1 RS-232 Serial Communication

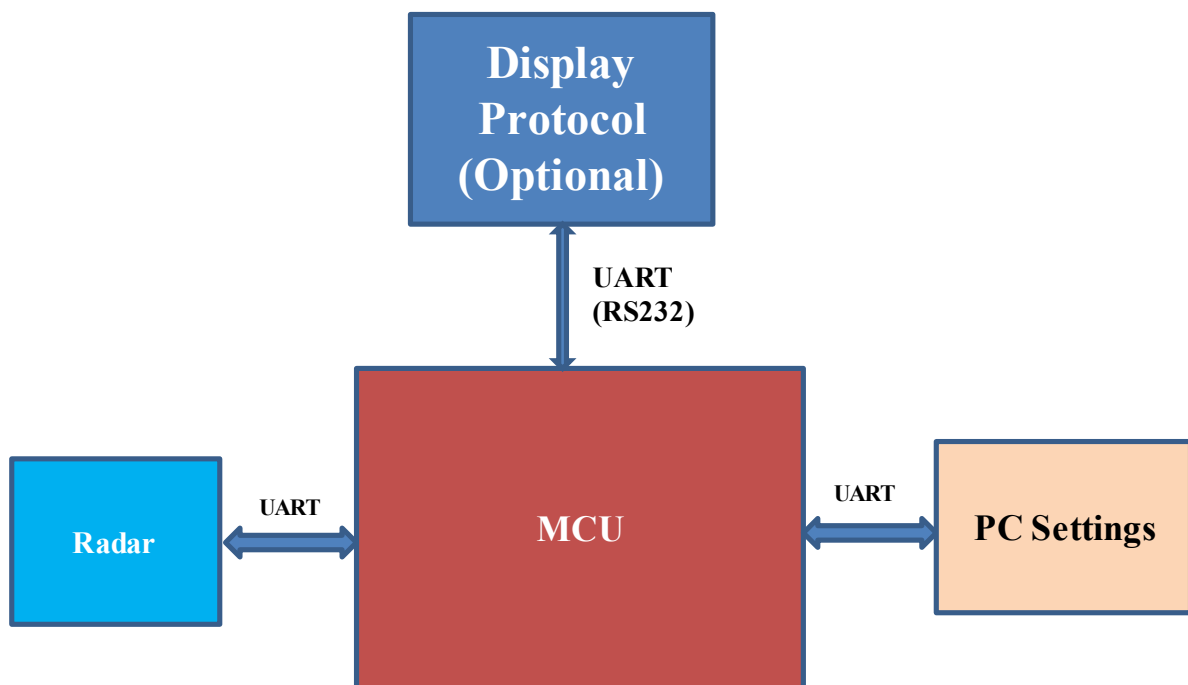
* Watch the protocol manual, Using RS-232 Serial Communication case.

Display Protocol Packet

Start	Type	FW_Data	BW_Data	Check Sum	End
1Byte	1Byte	1Byte	1Byte	1Byte	1Byte

Start : 0x02
 Type : Display Number(Velocity)
 FW/BW Data : Unsigned 8Bit
 Check sum : Modulo – 256 Check sum
 End : 0x03

4. Block Diagram



5. Order Information

Model	Description
KV-M100	24GHz CW Radar transceiver DFS System, Velocity measurement

Product : KV-M100

Manufacturer / Manufacture Country : CRAECA Co., Ltd / Republic of Korea

Date of Manufacture : Separately indicated

Rated Voltage : DC 12 V

***All the contents are subject to change without any notice.**