

**DRAFT**

# RE40 Specifications

General Specifications	
<b>Variants</b>	<p>RE40 Module — Variant 1: Orderable as Tape and Reel (200 qty/reel) or Tray (10 qty/tray)</p> <p>RE40 Module — Variant 2: RE40 Carrier Board</p> <ul style="list-style-type: none"> <li>Ports: 2 monostatic ports (2 x MMCX connectors)</li> <li>Package Dimension: 2.72 in. L x 1.69 in. W x 0.22 in. H/69 mm L x 43 mm W x 10mm H</li> <li>Weight: 18.6g (0.66 oz.)</li> <li>Connector: Hirose DF19-20S-1C (Plug- 20-pin board edge connector for power, communication and GPIO's)</li> </ul>
<b>Air Interface Protocol</b>	EPC Global UHF Class 1 Gen2/ ISO 18000-63
<b>TX Output Power</b>	<p>Single mono-static RF port</p> <p>Worldwide: -10 dBm to +27dBm (adjustable)</p> <p>Japan: -10 dBm to +24 dBm (adjustable)</p>
<b>Receiver Sensitivity</b>	-78 dBm
<b>Operating Frequency</b>	865- 928 MHz band for worldwide support
<b>Package Dimension</b>	1.06 in. L x 1.18 in. W x 0.118 in. D 27 mm L x 30 mm W x 3 mm D
<b>Package Weight</b>	0.187 oz./5.3 g
<b>Package Type</b>	62 pin surface mount package (SMT Compatible)
<b>DC Power Supply</b>	2.7V to 5.5V operating voltage
<b>Power Consumption</b>	<p>Operation mode &lt; 3.3 watts</p> <p>0.49 W in ready mode, 0.015 W in sleep mode, 0.000001 W in shutdown mode</p>
<b>General Purpose I/O</b>	Four (4) GPIO, two (2) GPO
<b>Interfaces</b>	UART and USB serial communication
<b>Compliance</b>	Certified: FCC, Canada and ETSI modular operation, ROHS compliant
Environmental	
<b>Operating Temperature</b>	-4° F to 140° F/-20° C to 60° C
<b>Storage Temperature</b>	-40° F to 185° F/-40° C to +85° C
<b>Humidity</b>	<p>Operating: 95% RH, non-condensing at 55°C;</p> <p>Storage: 85% RH, non-condensing at 70°C</p>
<b>Shock</b>	2000 G ± 5% for a period of 0.85 ± 0.05 msec over three axes (X, Y and Z), 2 directions per axis at all temperatures
<b>ESD</b>	±2kV (HBM) at pins; receiver pin ±1kV

## Software Interface

<b>RFID4 SDK for C, C# and Java</b>	C, C# (.NET core 3.0) and Java supported for Windows 10 64 bit, Ubuntu Linux 64 bit; Raspberry Pi Linux (Raspbian 4.19) 32 bit C# (.NET 4.5.2 framework) for Windows
<b>RCI</b>	Windows 10 64 bit; Raspberry Pi Linux (Raspbian 4.19) 32 bit, Ubuntu Linux

## Tools

<b>123RFID Desktop</b>	GUI-based application for Windows 10 64 bit
<b>Console Based Demo Tool for .NET Core 3.0</b>	Console application for .NET core 3.0 to demonstrate reader configuration and file-based f/w update (in hosts where 123RFID Desktop cannot be used)

## Development Kit Radio Engine (DKRE)

- For fast testing and software development. Kit contents include:
- Development PCB (2 RF ports, Serial, USB, power connection)
  - Antennas
  - Power supply
  - Cables — RF cable, USB cable, power cable
  - Tag Samples
  - Quick Start Guide and USB drive with additional documentation
  - RF modules

## Regulatory

Environmental EN 50581:2012  
 Electrical Safety IEC 62368-1 (ed.2) EN 62368-1:2014/AC:2015  
 EMI/RFI EN 55032:2012/AC:2013 (Class B) EN 55032:2015/AC:2016 (Class B) EN 55024:2010 EN 55024:2010/A1:2015 EN 55035:2017 47 CFR Part 15, Subpart B, Class B

## Warranty

Subject to the terms of Zebra's hardware warranty statement, the RE40 Module is warranted against defects in workmanship and materials for a period of 15 months from the date of shipment. For complete warranty statement, go to: <http://www.zebra.com/warranty>

## Markets, Applications and Devices

### Vertical Markets

- Healthcare
- Manufacturing
- Retail
- Gaming
- Transportation & Logistics
- Government

### Applications

- Inventory management
- Asset tracking
- Industrial automation
- Process control
- Item verification and authentication
- Access control

### Devices

- Medical devices
- Medical carts
- Medical cabinets
- Kiosks
- Commercial refrigeration
- Smart lockers
- Robots
- Vending machines
- Tool cribs
- Casino terminals and tables
- Ticketing systems
- Printers
- Sleds
- Point-of-Sale (POS) terminals
- IoT devices
- ...and more



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