

## RedDragon (RD8) on Diamond<sub>x</sub>

UWB Transceiver Testing using RedDragon (RD8)



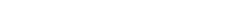




This eLearning material introduces the student to UWB transceiver testing using the RedDragon (RD8) on the Diamondx test system. It builds upon the material introduced in the RedDragon (RD8) on Diamondx course. On completion of this course the student will be able to describe integrated wireless RF transceiver devices and some tests used when verifying their functionality, demonstrate a working knowledge of RF Continuous Wave (CW) and Modulating (MOD) Transmitter (TX) and Receiver (RX) testing techniques and good programming principles. This is accomplished by a combination of multimedia presentations and interactive software demonstrations.

#### **Course Outline**

- Transceiver RF Testing Fundamentals
- UWB Transceiver CW TX Tests
- UWB Transceiver Modulating TX Tests
- UWB Transceiver Receiver (RX) Tests



## **Course Length**

• Self-paced – 1.5-2 hours depending on skill level

### **Prerequisites**

- Six months test program experience
- Successful completion of Unison Applications Programming course
- Successful completion of RedDragon (RD8) on Diamondx

#### Recommended

- C and C++ programming
- Familiarity with Linux Operating System
- · English written and spoken



**Automotive** 



Mobility



IoT/IoV & Optoelectronics



Computing & Network



Industrial & Medical



Consumer

- Next-gen test system for wide range of RF applications
- Scalable high-throughput architecture
- Flexible configurations and solutions

- Small form factor
- Air-cooled architecture and instruments
- Compact low-power technology



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#### **Course Modules**

### 1 - Integrated Transceiver RF Testing Fundamentals

On completion of this module student will be able to:

- Identify the components and major functional areas of a transceiver device
- List some core tests used to verify device functionality

#### 2 - UWB Transceiver Transmitter (TX) Tests

On completion of this module student will be able to:

- Demonstrate a working knowledge of RF CW TX testing and good programming principles
- Demonstrate a working knowledge of RF MOD TX testing and good programming principles
- Complete a series of interactive programming demonstrations using the RedDragon RD8 hardware on a simulated Diamondx test system using an example UWB device

#### 3 - UWB Transceiver Receiver (RX) Tests

On completion of this module student will be able to:

- Demonstrate a working knowledge of RF RX testing and good programming principles
- Complete an interactive programming demonstration using the RedDragon RD8 hardware on a simulated Diamondx test system using an example UWB device

- Next-gen test system for wide range of RF applications
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- Flexible configurations and solutions

- Small form factor
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#### Who Should Attend

- Test system application engineers
- Test program development and support engineers

### **Course Viewing Requirements**

To view the course, you must have:

- Browser supporting HTML5
- Audio-listening capabilities (such as a headset or speakers)
- Connection speed of at least 600 kbps

#### **Course Cost**

• Free of charge for all Cohu Semiconductor Tester Customers

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