RentCafe Home IQ Hub

Internal Photos non-LTE

Model: **H4P3-TW**

Creation Date: **October 2, 2023**

Revision #:   **1.2**

Revision Date: **June 17, 2024**

Document Status: **Preliminary**

TABLE OF CONTENTS

1. Revision History

Revision	Date	Author(s)	Comments
1.0	10/2/23	Dan Cedrone	Initial version preliminary release
1.1	4/8/24	Dan Cedrone	Updated with production PCB 101-05004-002
1.2	6/17/24	Dan Cedrone	Added detailed assembly

2. ZWave 800 Radio

FCC ID 2BAL9YDIZW
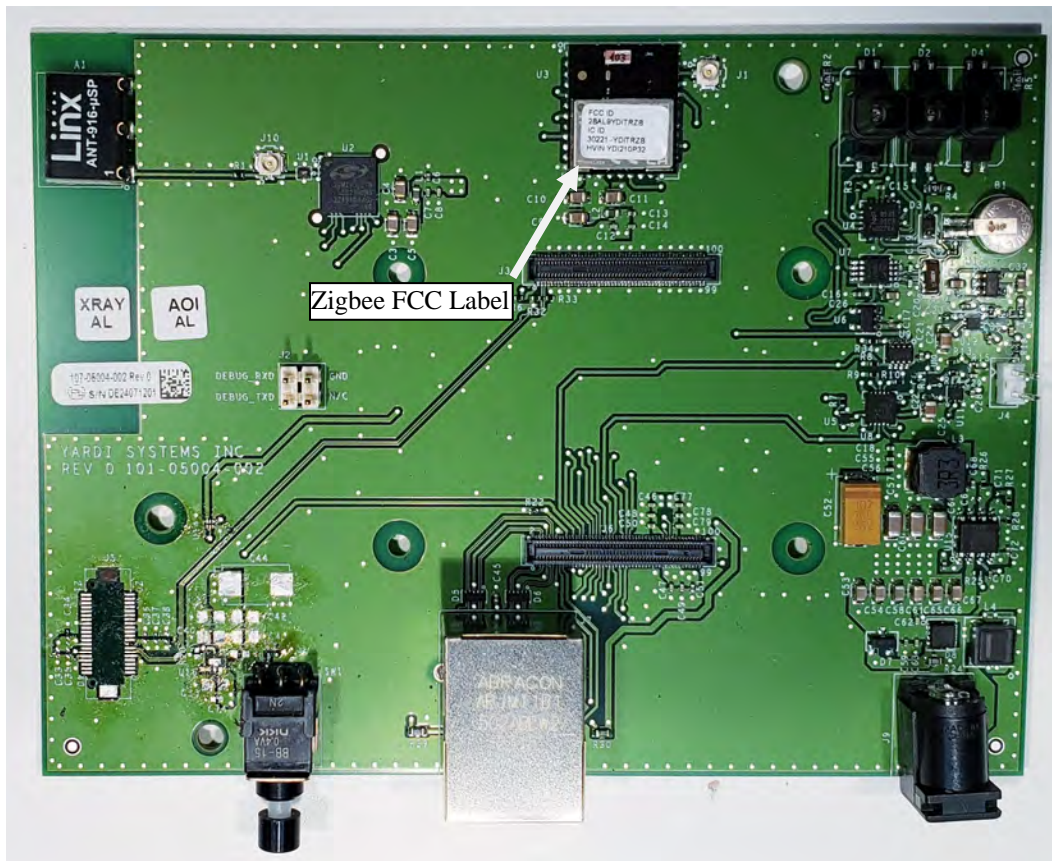IC ID 30221 -YDIZW
HVIN H4P3-TW

3. Assembly H4P3-TW Hub

BOM Assembly 103-05004-120

3.1 Base Module – Install ZigBee FCC Label

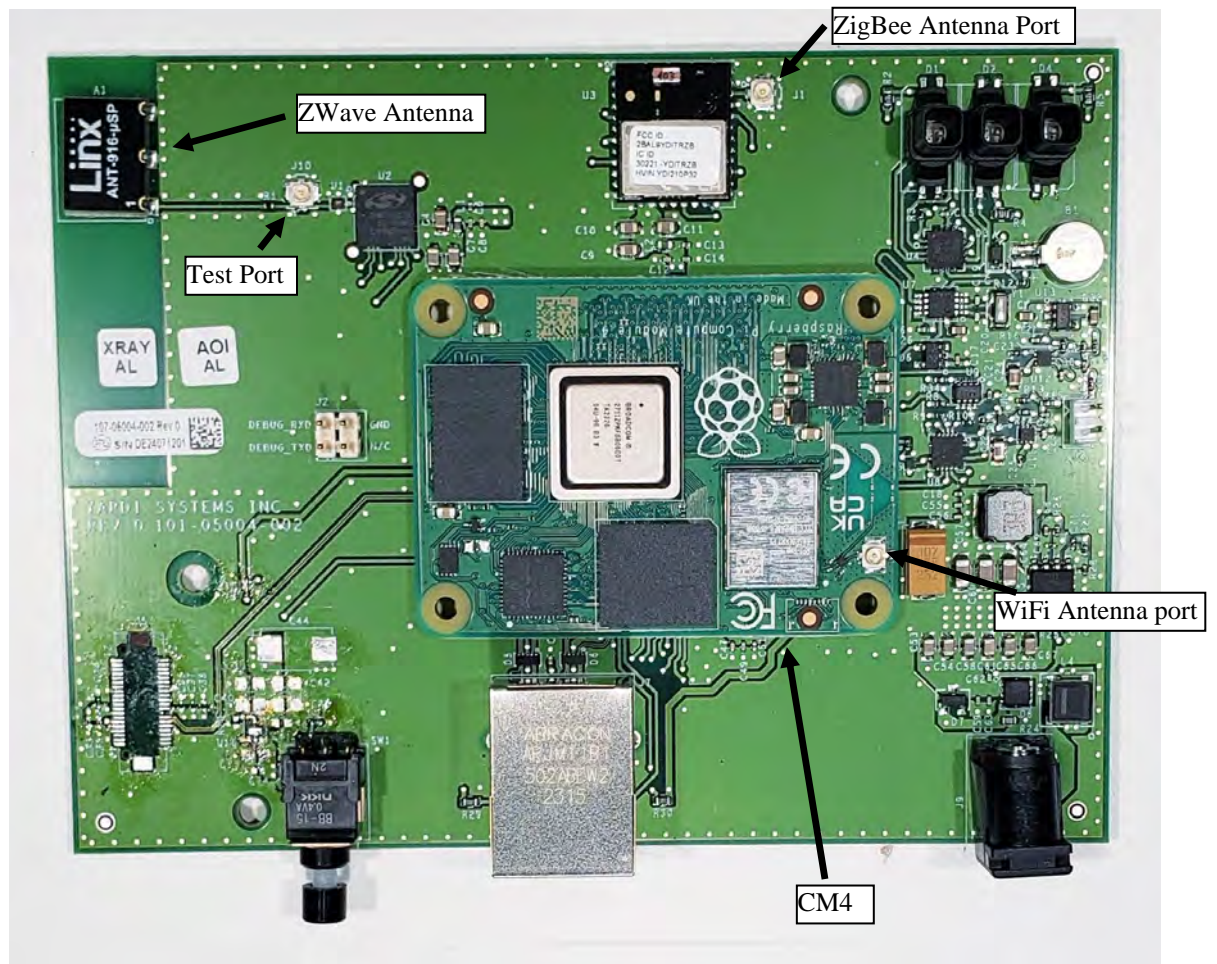**Material added this Step:**
100-05004-010 Base Module CM4, Zwave, Thread
552-05004-310 ZigBee FCC radio label .400x.250

Zigbee FCC Label

3.2 Base Module - Install CM4

Material added this Step:
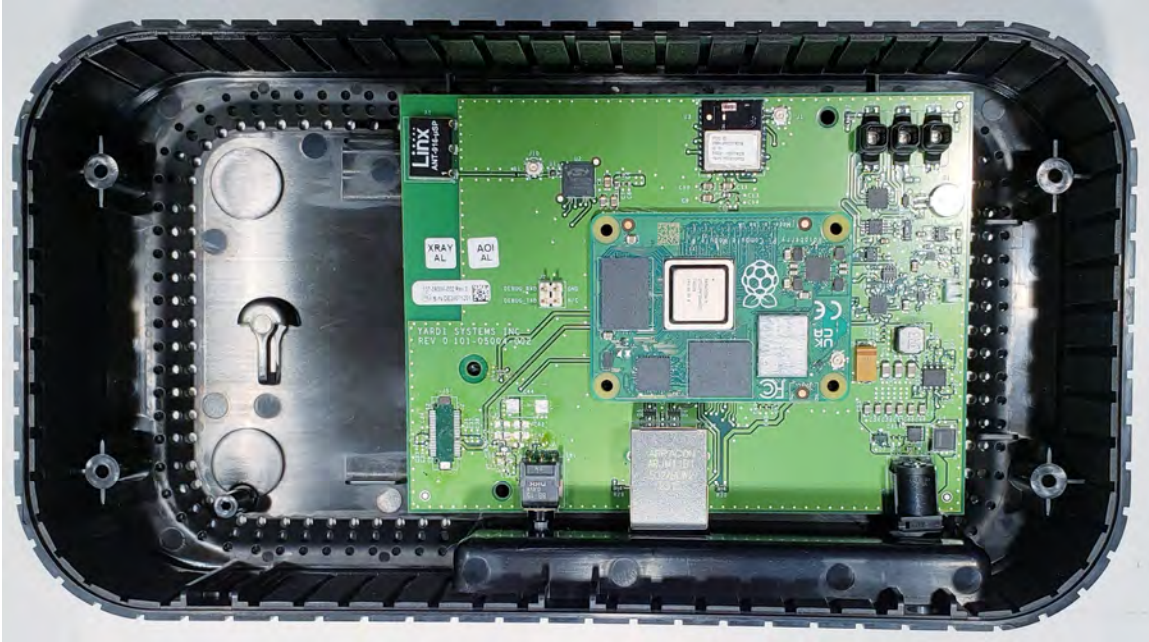100-00669-216 Compute Module 4

3.3 Case Base – Install Base Module

Material added this Step:
570-05004-122 Plastic, H4P3 Hub Base G3

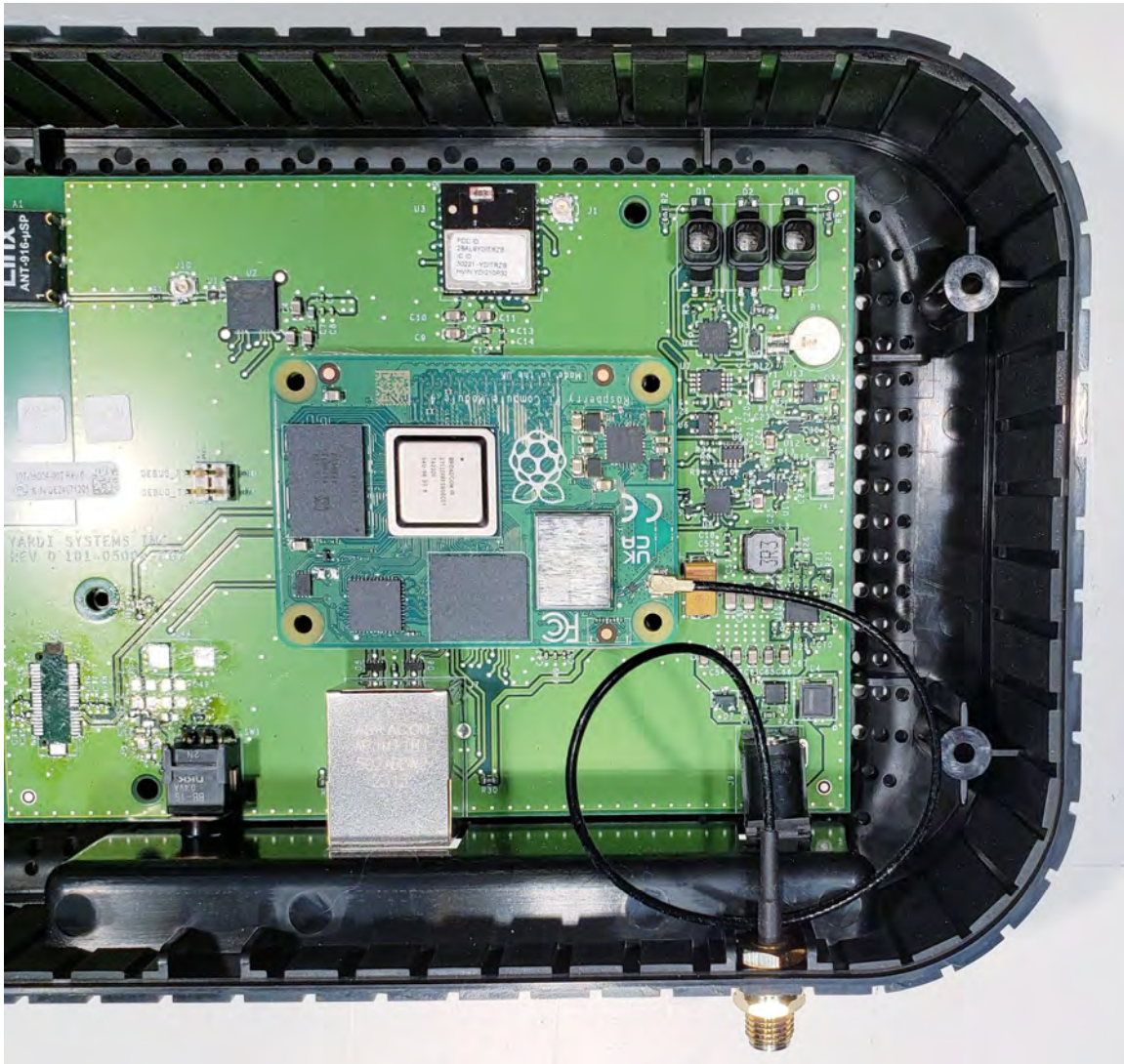Install Base Module into the plastic Base.

3.4 CM4 - Install Antenna Cable

Material added this Step:
551-00480-000 WiFi Antenna and SMA coax cable - cable only

Insert the SMA connector into the Case Base hole. The SMA connector has two washers. Both on the outside. The tooth lock washer first, the split lock washer second and the nut. Tighten the nut securely. Plug the antenna cable into the CM4 UF.L connector.
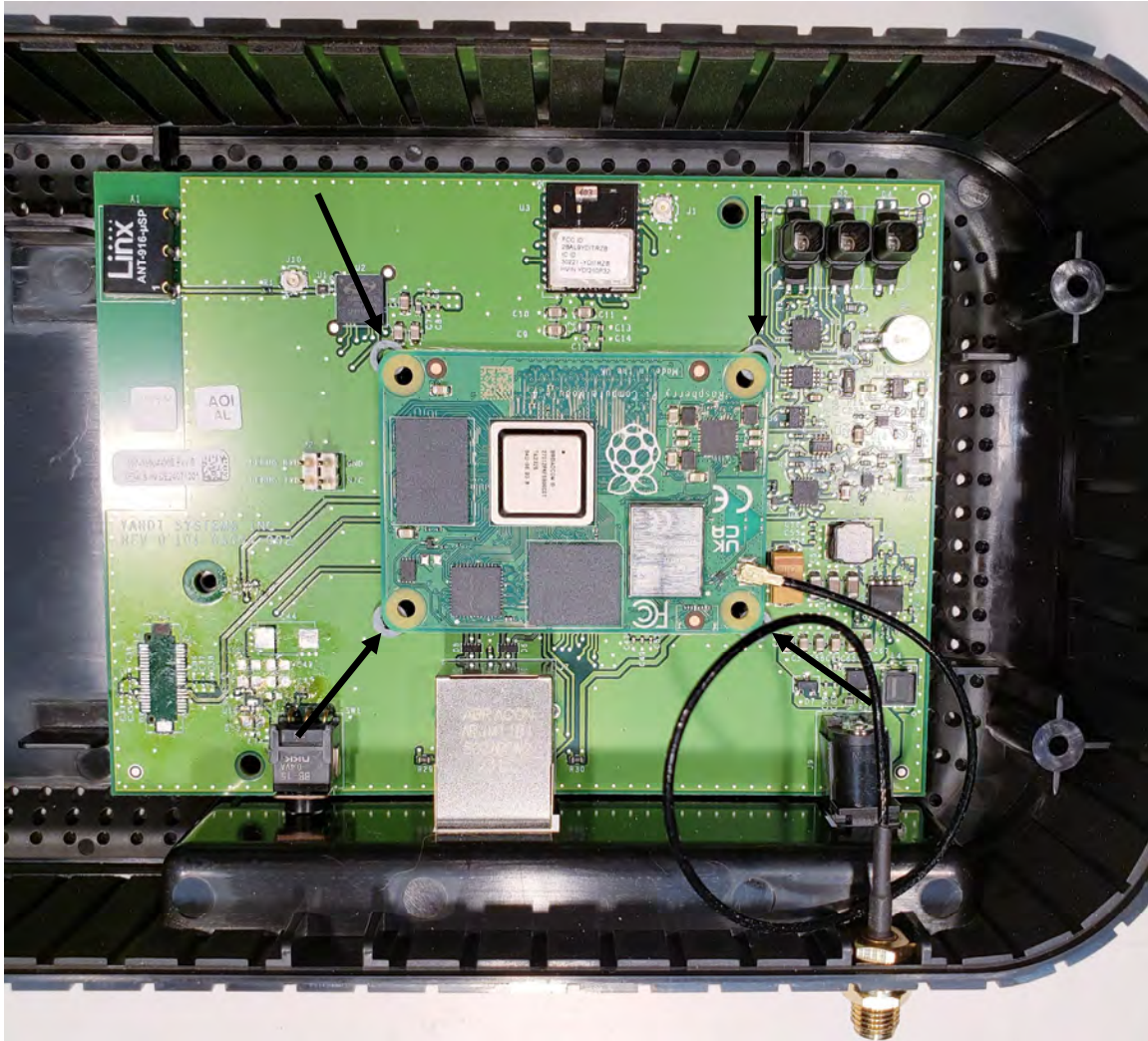
3.5 *CM4 - Install Heat Sink*

3.5.1 Install Spacer Washers

Material added this Step:
503-02500-001 M2.5 plastic washer, 1.5mm

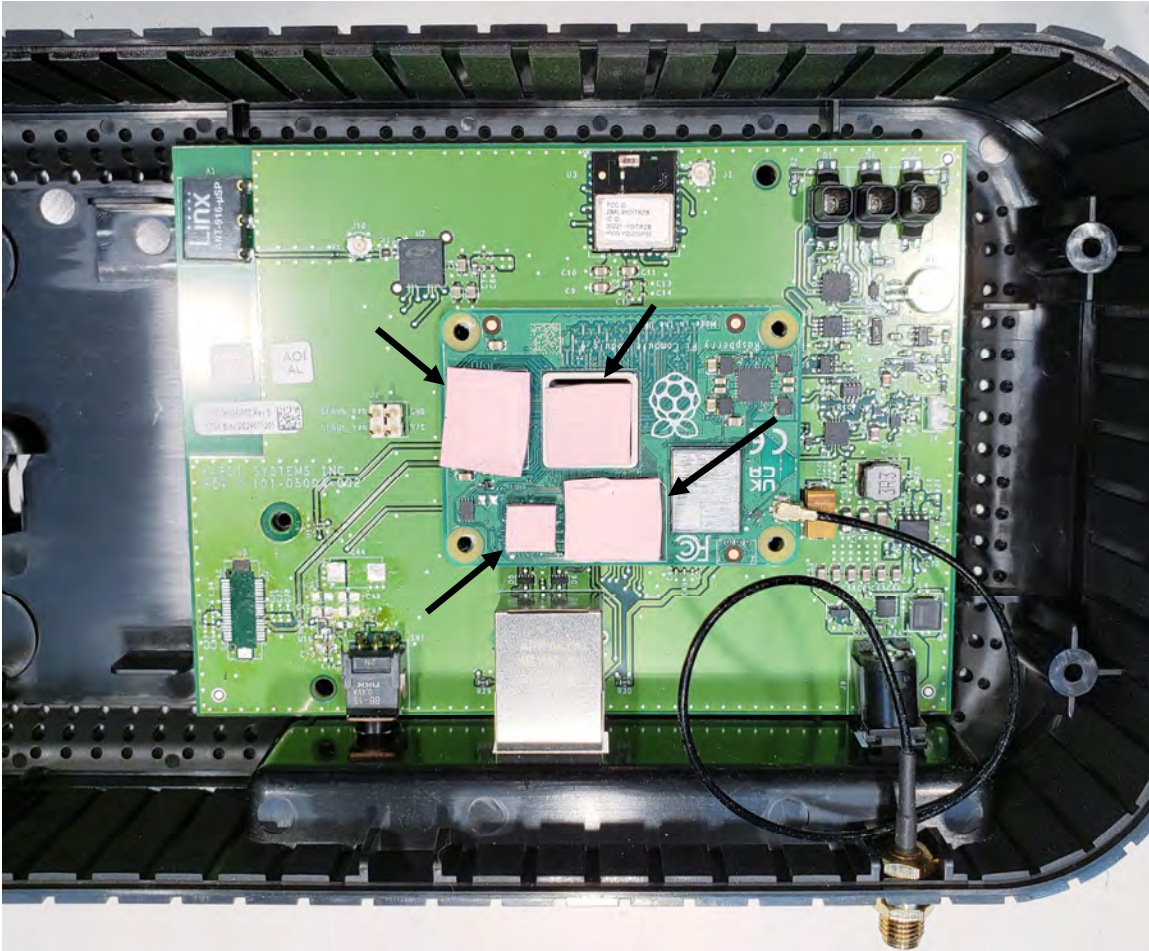Place the washers as shown and slide them, under the CM4 module until they align with the holes in the CM4.

3.5.2 Install Thermal Pads

Material added this Step:

504-11499-980 Heat Sink Kit – Thermal Pads

The thermal pads have plastic on each side. Remove the plastic from one side and place it on the component.
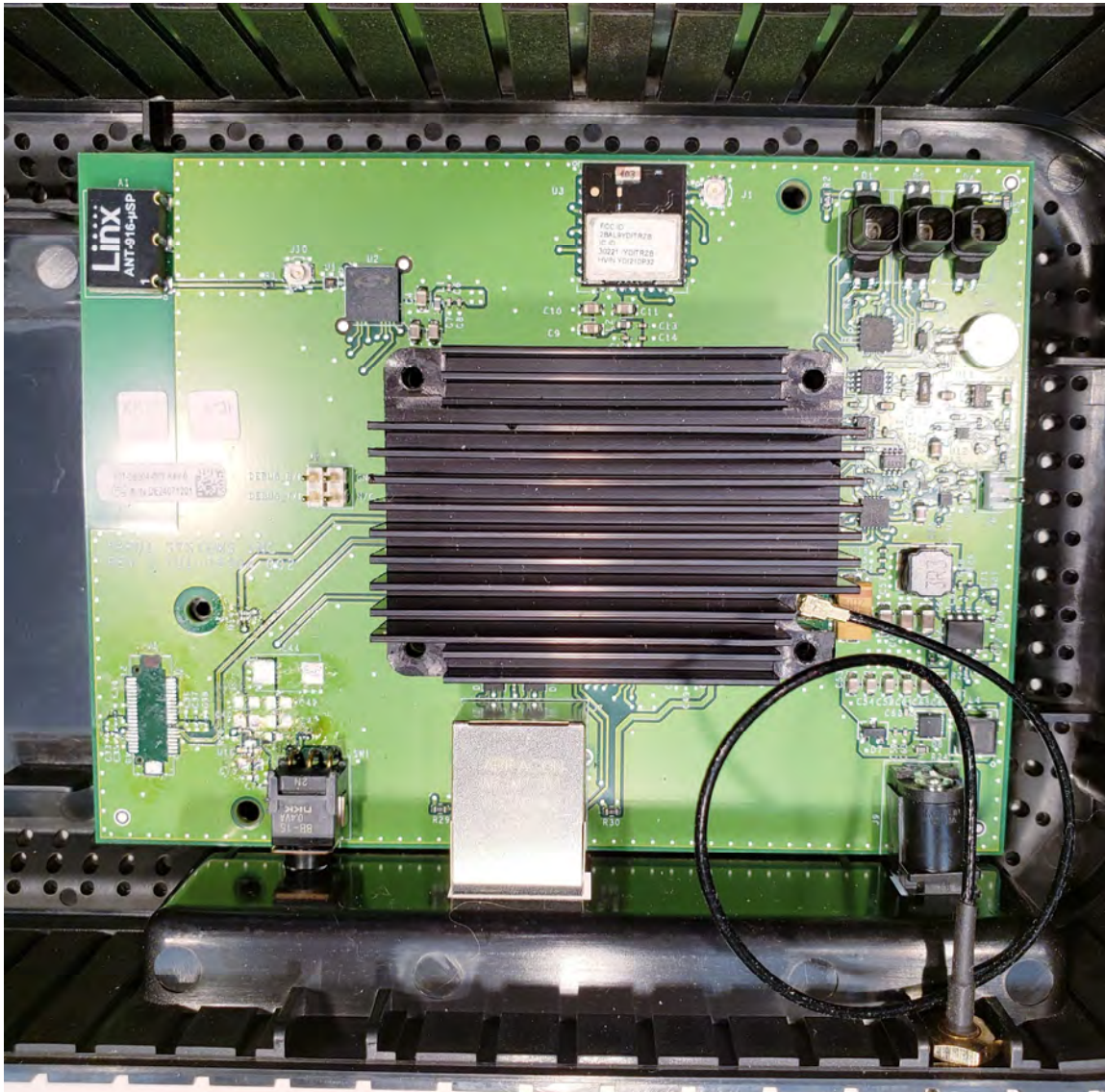
3.5.3 Install Heat Sink

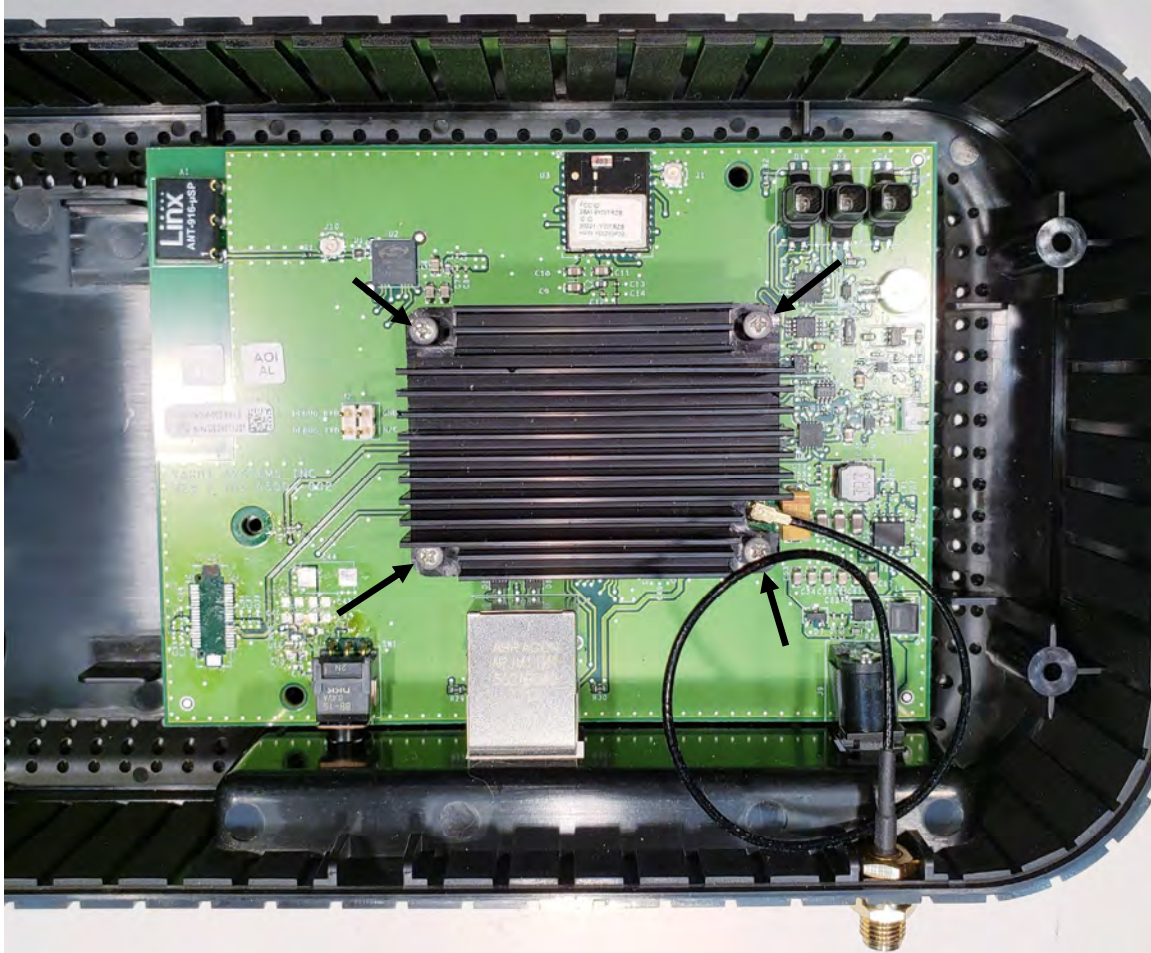**Material added this Step:**

504-11499-980 Heat Sink Kit – Heat Sink

Remove the plastic on the thermal pads and place the heat sink over the CM4. Secure with 4 screws. DO NOT OVER TIGHTEN. The heat sink can only be placed one direction. It has raised surfaces that only fit one way.

3.6 Base Module – Install screws
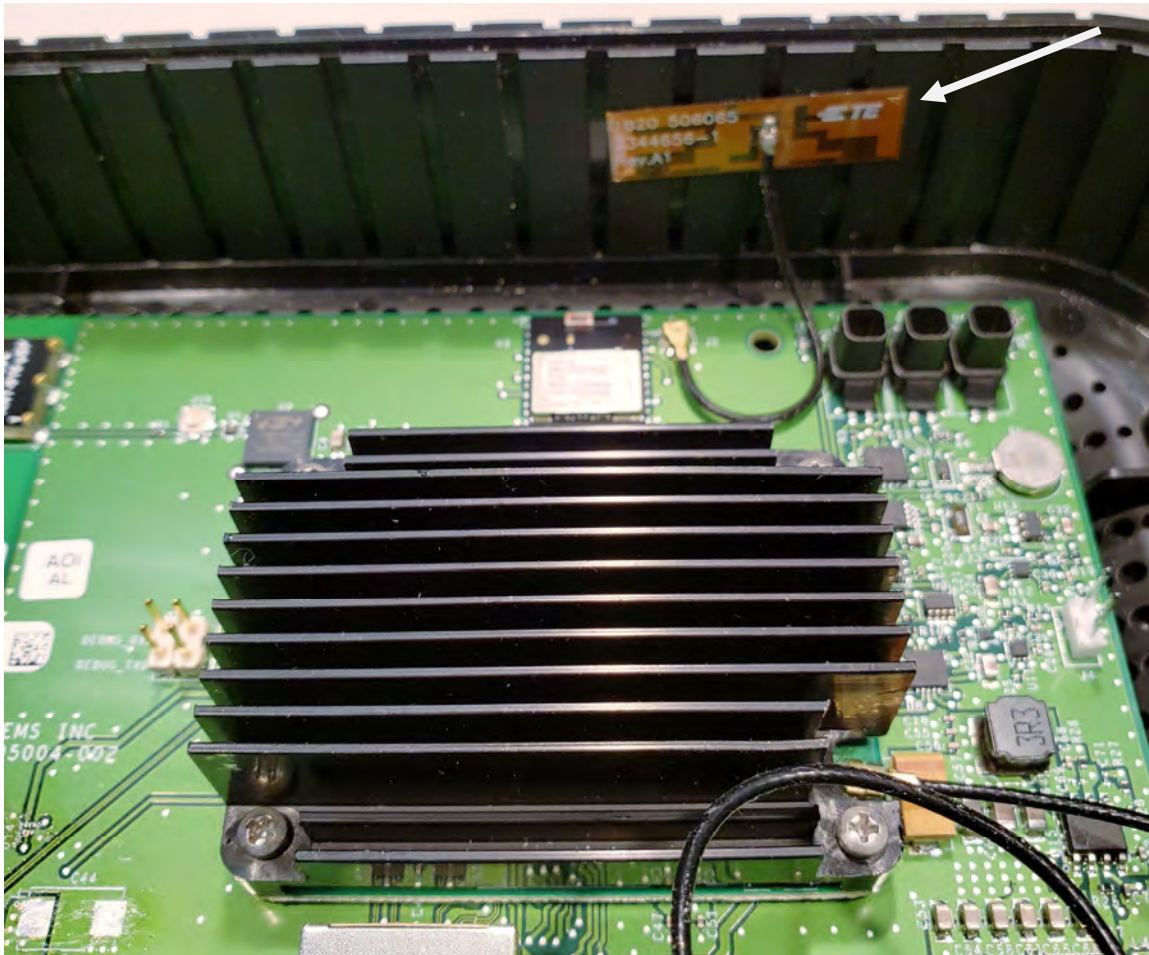
Material added this Step:

503-02500-010 SCR, #2x1/2, Thread forming, SS, Phillips pan head

3.7 Case Base – Install Thread/Zigbee Radio Antenna

Material added this Step:
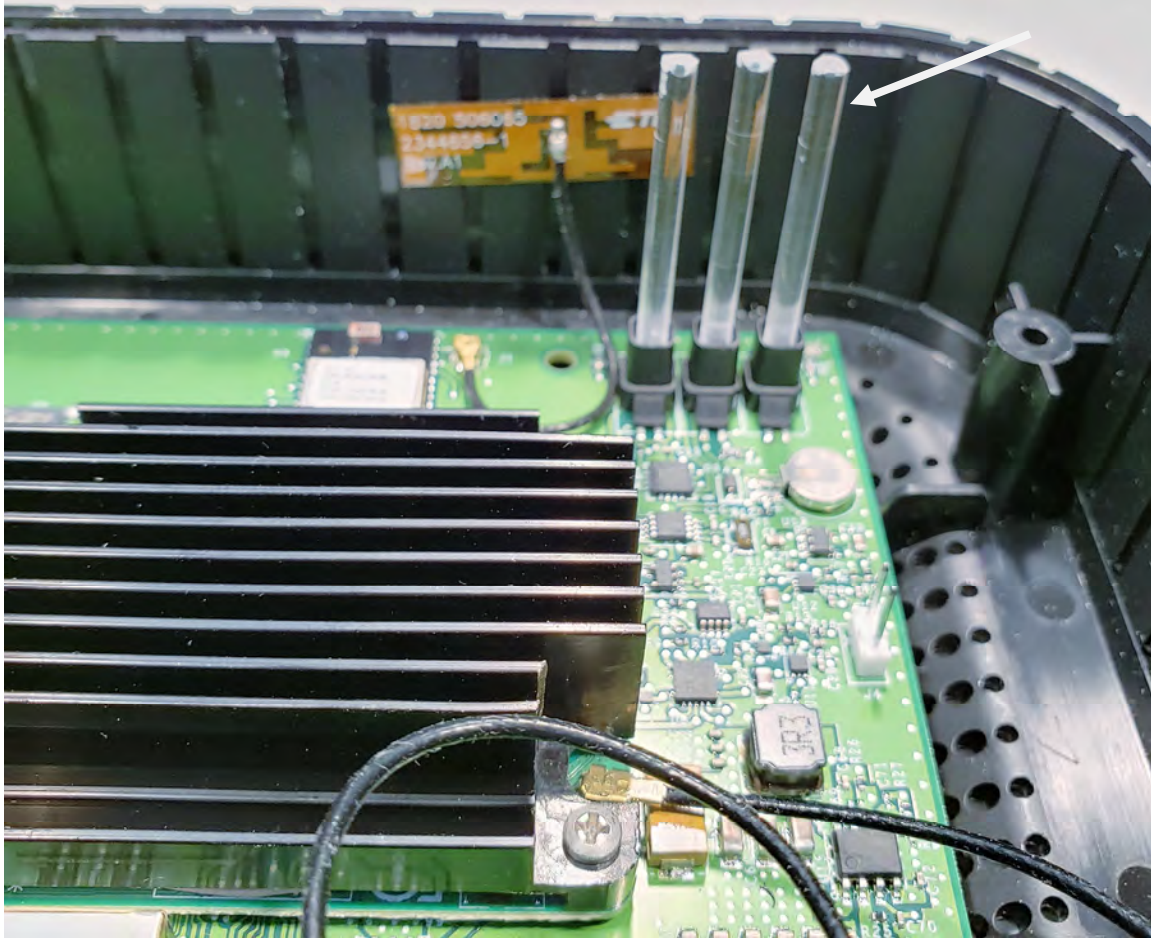551-02344-656 FPC Antenna WLAN Dual Band

3.8 Case Base – Install LED Light Pipes

Material added this Step:
221-31500-000 LED, SMT, RGB, 1500 mil Light Pipe
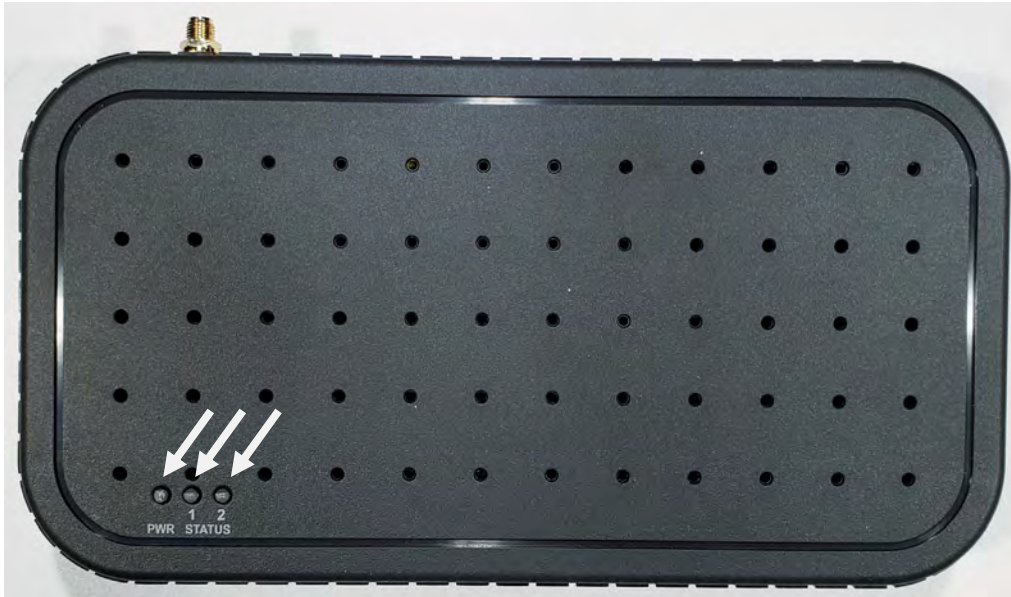221-31500-010 LED, SMT, Green, 1500 mil Light Pipe

3.9 Case Base - Install Case Cover

Material added this Step:
570-05004-121 Plastic, H4P3 Hub Cover G3

Place cover onto the Case Base. You must align the LED light pipes to the three holes in the cover.

3.10 Case Base - Install Rubber feet, Screws and Labels

Material added this Step:
503-02500-010 SCR, #2x1/2, Thread forming, SS, Phillips pan head
570-05004-001 Rubber, cylindrical flat bumper .375" Dia. X .125" Black
552-05004-120 FCC certifications
552-05004-200 ZWave Logo
552-05004-300 Zigbee Logo

Secure the cover with 4 screws as shown by the orange arrows. Install the rubber feet as shown by the white arrows.

Install the ZWave Logo, ZigBee Logo and FCC label.

3.11 Case Base - Install WiFi Antenna

Material added this Step:
551-00480-000 WiFi Antenna and SMA coax cable - Antenna

3.12 Case Base - Install Serial Number Label

Material added this Step:
552-05004-100 Smart Hub Product (S/N, Model)

The Serial Number label is printed at the Testbench station. **Shown here just for placement.**
The SN should start with XG.