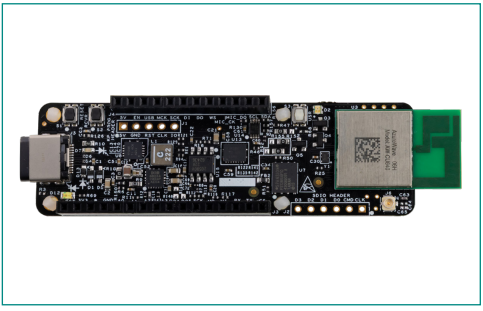
QUICK START GUIDE

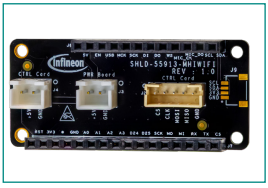
Modular Hybrid Inverter Connectivity Kit

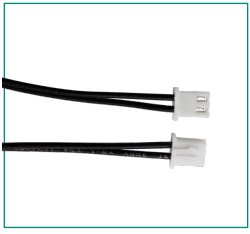
KIT-55913-MHIWIFI

Kit contents

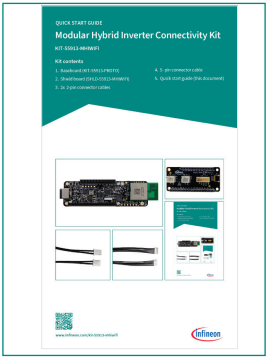
1. Baseboard (KIT-55913-PROTO)
2. Shield board (SHLD-55913-MHIWIFI)
3. 2x 2- pin connector cables
4. 5 - pin connector cable
5. Quick start guide (this document)



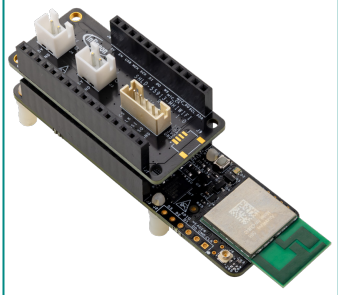








www.infineon.com/kit-55913-mhiwifi

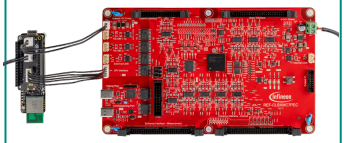


1 | Shield board mounted on baseboard

Before you start

1. Ensure that you have the following:
   - A Wi-Fi network/hotspot with the following default credentials:
     - **SSID: IFX_TEST_AP**
     - **Password: 12345678**
   - Control board (REF-CLBXMC7PEC)
   - Selected Power board (REF-6KWHERIC / REF-10KW3LNPC2)
2. Visit the kit webpage to download the required software design files.
   - Connectivity Kit - www.infineon.com/kit-55913-mhiwifi
   - Control board - www.infineon.com/ref-clbxmc7pec
3. Selected power stage boards. Supported power boards are:
   - 6 kW HERIC inverter (1-phase)
   - 10 kW NPC2 inverter (3-phase)

   More information on the Modular Hybrid Inverter Design Platform is available here www.infineon.com/mhi



2 | System Connections

Setting up the kit

1. Mount the shield board on the baseboard via the Adafruit compatible header as shown in figure 1.
2. Connect the header connectors on the shield board to their respective counterparts on the control board and power board as shown in Figure 2. Connector details are as per the table below.

   Refer page 3 for header positions on the board.

Shield Header	Connector counterpart Header
J2	Control board (X504)
J3	Isolated 5V supply from Power board
J4	Control board (X503)

3. Power up the power boards after ensuring all connections are correct.

3 | Dashboard Login page QR Code

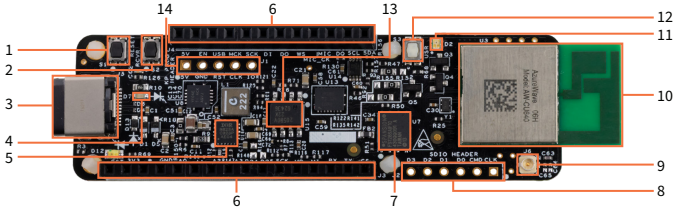


4 | MHI dashboard login webpage

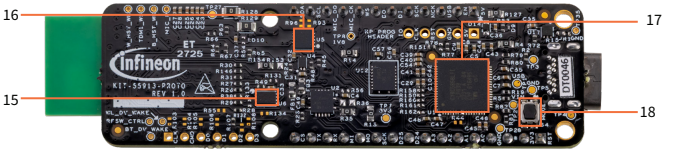
Setting up the MHI dashboard

1. Scan the QR code in Figure 3. This will be redirected to an MHI dashboard login webpage as shown in Figure 4.
2. Enter the login credentials provided at the bottom of the kit box and click **Login** and an MHI dashboard home page will come up on successful login.

KIT-55913-MHIWIFI Baseboard top view details



KIT-55913-MHIWIFI Baseboard Bottom view details



Shield Board Top view



Baseboard

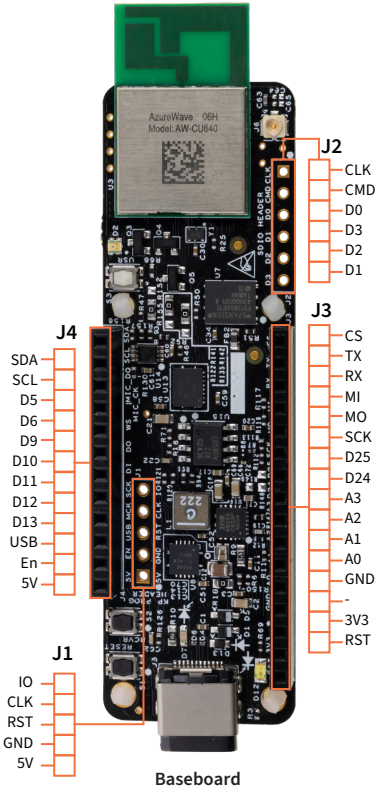
1 Reset Switch (S1)
2 Recovery Switch (S2)
3 KitProg3 USB-C connector (J5)
4 Power LED (D7)
5 3.3V Buck Regulator(IR3823AMTRPBF, U16)
6 Adafruit compatible GPIO header (J3, J4)
7 External Flash(S25FS128SAGNFI103, U7)
8 SDIO Header (J2)
9 External radio antenna connector (J6)
10 CYW55913 module (AzureWave AQ-CU640, U3)
11 User RGB LED (D2)
12 User button (S3)
13 1.8V LDO (TLS205B0EJV, U15)
14 KitProg3 Programming header (J1)
15 PSRAM (U6)
16 OPTIGA™ Trust M (SLS32AIA010MLUSON10XTMA2, U5)
17 KitProg3 (PSOC™ 5LP) programmer and debugger (CY8C5868LTI-LP039, U1)
18 KitProg3 programming mode selection button (S4)

Shield Board

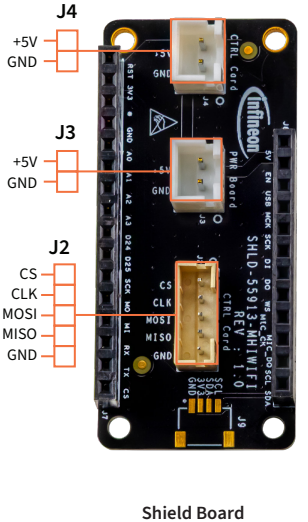
19 Adafruit compatible GPIO stacking header (J7, J8)
20 SPI connector header (J2)
21 Power board connector header (J3)
22 Control board connector header (J4)

Note: Refer to page 4 for details on the pinouts of headers pointed by numbers 6, 8, 14, 20, 21, 22

KIT-55913-MHIWIFI kit pinout details



Baseboard



Shield Board

See the kit guide available at www.infineon.com/kit-55913-mhiwifi for details.

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