

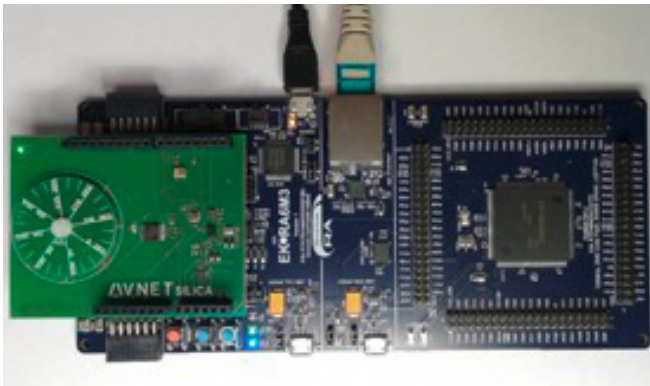


HoriZone-RENRA  
Quick Start Guide

# Quick start

## CONTENT

- EK-RA6M3 development board
- Avnet Silica sensor board
- Network cable
- USB micro B cable



## CONNECT

1. Plug the unit onto the Arduino Shield of the EK-RA6M3
2. Plug in the network cable and connect to your network switch (internet access must be available). Plug in the USB micro B and connect to PC USB port.

## CONFIGURATION

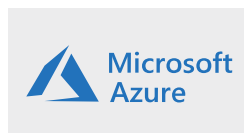
1. Configure your Azure account and the IoT Hub
2. Create device credentials for secure provisioning on the Azure IoT Hub
3. Get the RenesasRA project files
  - The device credentials you obtained from the IoT Hub should be included in the project files
  - Compile the project
4. Compile and load the executable on the board
  - The program starts
  - After a few seconds, the red LED3 will light up
  - If the network is UP, the red LED3 goes off and the green LED2 lights up
  - The blue LED1 will light up when your own Azure Hub is connected



5. You can see your device data on Azure

```
PowerShell - Authentication to Azure...
VERBOS: Building your Azure drive ...
PS /home/abc15961> az iot hub monitor-events --device-id 1269_test0 --hub-name RA-1254-148
Starting event monitor, filtering on device: 1269_test0, use ctrl-c to stop...
{
  "event": {
    "origin": "1269_test0",
    "payload": "{\"deviceId\":\"1269_test0\",\"frame #\":\"66\",\"acc X\":\"-5.0\",\"acc Y\":\"-7.0\",\"acc Z\":\"1009.0\",\"ang X\":\"0.3\",\"ang Y\":\"-0.1\",\"ang Z\":\"0.5\",\"angle\":\"360.0\",\"temperature\":\"25.33\",\"humidity\":\"28.0\",\"light\":\"2906.0\",\"pressure\":\"979.3\",\"gas\":\"438.0\",\"noise\":\"40.0\"}"
  }
}
{
  "event": {
    "origin": "1269_test0",
    "payload": "{\"deviceId\":\"1269_test0\",\"frame #\":\"67\",\"acc X\":\"-6.0\",\"acc Y\":\"-3.0\",\"acc Z\":\"1009.0\",\"ang X\":\"0.3\",\"ang Y\":\"-0.1\",\"ang Z\":\"0.5\",\"angle\":\"360.0\",\"temperature\":\"25.33\",\"humidity\":\"29.0\",\"light\":\"2750.0\",\"pressure\":\"979.3\",\"gas\":\"438.0\",\"noise\":\"39.0\"}"
  }
}
```

## SUPPORTING PARTNERS:



# TERMS AND CONDITIONS

## TERMS AND CONDITIONS FOR THE USE OF THE BOARD

Avnet provides the enclosed product under the following conditions:

This HORIZONE-RENRA is intended for use for **ENGINEERING DEVELOPMENT, DEMONSTRATION OR EVALUATION PURPOSES ONLY.**

Using it for any other purpose is not permitted and you do so at your own risk.

People handling the Kit must have electronics training and observe good engineering practice standards.

Please ensure you carefully observe the instructions of the User Manual.

Avnet does not: (i) transfer any rights of ownership of any copyrights, patents, trade secrets, trademarks or other Intellectual Property Rights (ii) transfer any rights of ownership of any third party owned technology; or (iii) grant to you any right to make, use or sell technology provided by the other party in any manner or for any purpose not expressly permitted by any applicable license limitations and restrictions or (iv) prevent or restrict the use of any such technology by its respective owner for any purpose.

All orders and purchases for HORIZONE-RENRA are governed by Avnet's Terms and Conditions of Sale, which are available at <https://www.avnet.com/wps/portal/us/company/terms-and-conditions-of-sale>.

# Offices

## AUSTRIA

Vienna  
Phone: +43 186 642 300  
Fax: +43 186 642 350  
wien@avnet.eu

## BELGIUM

Merelbeke  
Phone: +32 9 210 24 70  
Fax: +32 9 210 24 87  
gent@avnet.eu

## BULGARIA

Sofia  
sofia@avnet.eu

## CZECH REPUBLIC (SLOVAKIA)

Prague  
Phone: +420 234 091 031  
Fax: +420 234 091 030  
praha@avnet.eu

## DENMARK

Herlev  
Phone: +45 432 280 10  
Fax: +45 432 280 11  
herlev@avnet.eu

## ESTONIA

(LATVIA, LITHUANIA)  
Pärnu  
Phone: +372 56 637737  
paernu@avnet.eu

## FINLAND

Espoo  
Phone: +358 207 499 200  
Fax: +358 207 499 280  
helsinki@avnet.eu

## FRANCE (TUNISIA)

Cesson Sévigné  
Phone: +33 299 838 485  
Fax: +33 299 838 083  
rennes@avnet.eu

## Illkirch

Phone: +33 390 402 020  
Fax: +33 164 479 099  
strasbourg@avnet.eu

## Massy Cedex

Phone: +33 164 472 929  
Fax: +33 164 470 084  
paris@avnet.eu

## Toulouse

Phone: +33 05 62 47 47  
toulouse@avnet.eu

## Vénissieux Cedex

Phone: +33 478 771 360  
Fax: +33 478 771 399  
lyon@avnet.eu

## GERMANY

Berlin  
Phone: +49 30 214 882 0  
Fax: +49 30 214 882 33  
berlin@avnet.eu

## Freiburg

Phone: +49 761 881 941 0  
Fax: +49 761 881 944 0  
freiburg@avnet.eu

## Hamburg

Phone: +49 40 608 235 922  
Fax: +49 40 608 235 920  
hamburg@avnet.eu

## Holzwickede

Phone: +49 2301 919 0  
Fax: +49 2301 919 222  
holzwickede@avnet.eu

## Lehrte

Phone: +49 5132 5099 0  
hannover@avnet.eu

## Leinfelden-Echterdingen

Phone: +49 711 782 600 1  
Fax: +49 711 782 602 00  
stuttgart@avnet.eu

## Leipzig

Phone: +49 34204 7056 00  
Fax: +49 34204 7056 11  
leipzig@avnet.eu

## Nürnberg

Phone: +49 911 24425 80  
Fax: +49 911 24425 85  
nuernberg@avnet.eu

## Poing

Phone: +49 8121 777 02  
Fax: +49 8121 777 531  
muenchen@avnet.eu

## Wiesbaden

Phone: +49 612 258 710  
Fax: +49 612 258 713 33  
wiesbaden@avnet.eu

## HUNGARY

Budapest  
Phone: +36 1 43 67215  
Fax: +36 1 43 67213  
budapest@avnet.eu

## ITALY

Cusano Milanino  
Phone: +39 02 660 921  
Fax: +39 02 660 923 33  
milano@avnet.eu

## Firenze

Phone: +39 055 428 2301  
Fax: +39 055 431 035  
firenze@avnet.eu

## Modena

Phone: +39 059 348 933  
Fax: +39 059 344 993  
modena@avnet.eu

## Padova

Phone: +39 049 807 368 9  
Fax: +39 049 773 464  
padova@avnet.eu

## Rivoli

Phone: +39 011 204 437  
Fax: +39 011 242 869 9  
torino@avnet.eu

## Roma Tecnocittà

Phone: +39 06 412 319 10  
Fax: +39 06 413 116 1  
roma@avnet.eu

## NETHERLANDS

Breda  
Phone: +31 765 722 700  
Fax: +31 765 722 707  
breda@avnet.eu

## NORWAY

Asker  
Phone: +47 667 736 00  
Fax: +47 667 736 77  
asker@avnet.eu

## POLAND

Gdansk  
Phone: +48 58 307 81 51  
Fax: +48 58 307 81 50  
gdansk@avnet.eu

## Katowice

Phone: +48 32 259 50 10  
Fax: +48 32 259 50 11  
katowice@avnet.eu

## Warszawa

Phone: +48 222 565 760  
Fax: +48 222 565 766  
warszawa@avnet.eu

## PORTUGAL

Vila Nova de Gaia  
Phone: +35 1 223 779 502  
Fax: +35 1 223 779 503  
porto@avnet.eu

## ROMANIA (BULGARIA)

Bucharest  
Phone: +40 21 528 16 32  
Fax: +40 21 529 68 30  
bucuresti@avnet.eu

## RUSSIA (BELARUS, UKRAINE)

Moscow  
Phone: +7 495 737 36 70  
Fax: +7 495 737 36 71  
moscow@avnet.eu

## Saint Petersburg

Phone: +7 812 245 1571  
stpetersburg@avnet.eu

## SLOVAKIA

Bratislava  
Phone: +421 232 242 211  
Fax: +421 232 242 210  
bratislava@avnet.eu

## SLOVENIA

(BOSNIA AND HERZEGOVINA,  
CROATIA, MACEDONIA, MONTENEGRO,  
SERBIA)

Ljubljana  
Phone: +386 156 097 50  
Fax: +386 156 098 78  
ljubljana@avnet.eu

## SPAIN

Barcelona  
Phone: +34 933 278 530  
Fax: +34 934 250 544  
barcelona@avnet.eu

## Galdàcano. Vizcaya

Phone: +34 944 572 777  
Fax: +34 944 568 855  
bilbao@avnet.eu

## Las Matas

Phone: +34 913 727 100  
Fax: +34 916 369 788  
madrid@avnet.eu

## SWEDEN

Sundbyberg  
Phone: +46 8 587 461 00  
Fax: +46 8 587 461 01  
stockholm@avnet.eu

## SWITZERLAND

Rothrist  
Phone: +41 62 919 555 5  
Fax: +41 62 919 550 0  
rothrist@avnet.eu

## TURKEY (GREECE, EGYPT)

Kadikoy Istanbul  
Phone: +90 216 528 834 0  
Fax: +90 216 528 834 4  
istanbul@avnet.eu

## UNITED KINGDOM (IRELAND)

Berkshire  
Phone: +44 1628 512 900  
Fax: +44 1628 512 999  
maidenhead@avnet.eu

## Bolton

Phone: +44 1204 547 170  
Fax: +44 1204 547 171  
bolton@avnet.eu

## Bucks. Aylesbury

Phone: +44 1296 678 920  
Fax: +44 1296 678 939  
aylesbury@avnet.eu

## Stevenage, Herts, Meadway

Phone: +44 1438 788 310  
Fax: +44 1438 788 250  
stevenage@avnet.eu

## ISRAEL

Tel-Mond  
Phone: +972 (0)9 7780280  
Fax: +972 (0)3 760 1115  
avnet.israel@avnet.com

## SOUTH AFRICA

Cape Town  
Phone: +27 (0)21 689 4141  
Fax: +27 (0)21 686 4709  
sales@avnet.co.za

## Durban

Phone: +27 (0)31 266 8104  
sales@avnet.co.za

## Johannesburg

Phone: +27 (0)11 319 8600  
Fax: +27 (0)11 319 8650  
sales@avnet.co.za



**Mixed Sources**  
Product group from well-managed  
forests and other controlled sources  
www.fsc.org Cert no. IC-COC-10005  
© 1996 Forest Stewardship Council