Quick Start Guide
FRDM-KE16Z

FREEDOM DEVELOPMENT PLATFORM

NXP

GET TO KNOW THE FRDM-KE16Z
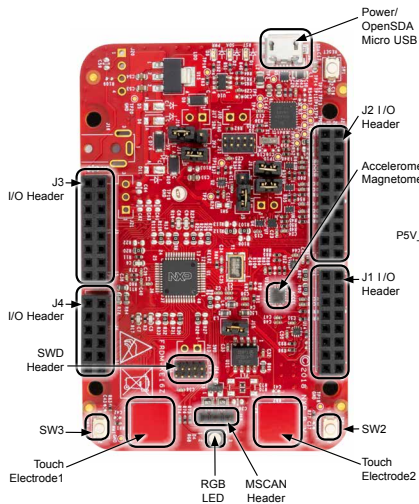

Power/
OpenSDA
Micro USB

J2 I/O
Header

Accelerometer/
Magnetometer

J1 I/O
Header

J3
I/O Header

J4
I/O Header

SWD
Header

SW3

SW2

Touch
Electrode1

RGB
LED

MSCAN
Header

Touch
Electrode2

Figure 1: FRDM-KE16Z Callouts

GND-19
PTE10-17
PTE11-15
PTD5-13
PTD6-11
PTC1-9
PTC0-7
PTA0-5
PTA1-3
PTC3-1
NC-15
NC-13
NC-11
NC-9
NC-7
NC-5
PTE6-3
NC-1

20-PTA3
18-PTA2
16-AREF
14-GND
12-PTB2
10-PTB3
8-PTB4
6-PTB5
4-PTC0
2-PTD4
16-PTE6
14-PTC1
12-PTD0
10-PTD3
8-PTD1
6-PTD2
4-PTC7
2-PTC6

NC-2
VDD-4
RESET-6
P3V3-8
P5V_LDO_OUT-10
GND-12
GND-14
P5-9V_VIN-16

1-PTC4
3-PTB3
5-PTB5
7-PTB4
9-PTD1
11-PTD0
13-PTC1
15-PTC0

PTC3-2
PTC2-4
PTA7-6
PTA6-8
PTA1-10
PTA0-12

1-PTE8
3-PTE0
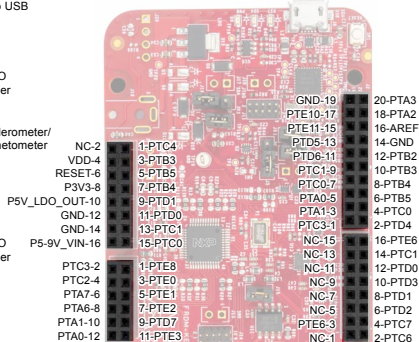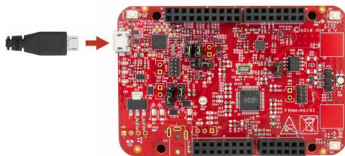5-PTE1
7-PTE2
9-PTD7
11-PTE3

Figure 2: FRDM-KE16Z Pin-Out

STEP-BY-STEP INSTRUCTIONS

1. Connect the FRDM-KE16Z board to a PC using the included micro-USB cable to the Power/OpenSDA Micro USB connector (J6) of the FRDM-KE16Z board. A power LED will illuminate.

2. The FRDM-KE16Z comes preprogrammed with a demo which leverages the onboard accelerometer. When the board is lying flat, the RGB LED is turned off. When the board is tilted, the red or blue LEDs will gradually illuminate based on the degree of tilt.

3. Explore more out-of-box demos and download software and tools on **www.nxp.com/FRDM-KE16Z**.

4. Enjoy your design freedom with the FRDM-KE16Z.

SUPPORT

Visit **www.nxp.com/support** for a list of phone numbers within your region.

WARRANTY

Visit **www.nxp.com/warranty** for complete warranty information.

Get Started

Download installation software and documentation under **"Jump Start Your Design"** at **www.nxp.com/FRDM-KE16Z**.

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