

Thank you all for your patience. The table below shows where the sensors team is with the various OpenSDA options for K64F.

	MBED CMSIS-DAP	Segger J-Link OpenSDAV2	P&E Micro OpenSDA V1.0 (early boards)	P&E Micro OpenSDA V2.0/2.1
Drag & drop	Yes	No	Yes (.s19)	Have not been successful in getting this one to work
CDC Bridge	Visible, but not functional with our software	Yes	Yes	
CW Download	NO	Yes	Yes	
CW Debug	No	Yes	Yes	

Here are my notes relating to the above.

Binary creation:

- MBED CMSIS-DAP has a problem with the “no flash security” setting of the FSEC configuration byte generated by Processor Expert.
- After PE code generation, manually change the NV_FSEC byte in CPU_Config.h from 0x7E to 0xFE. Repeat this whenever PE is rerun. This step appears to be required only for MBED.
- If CodeWarrior is configured to generate a binary file, it will have a .hex extension. Change .hex to .bin and you can drag&drop to an MBED drive
- Alternately use objcopy.exe to create a binary from an srecord.
- Recommended actions for the DevTech team:
 - s-record or binary outputs should not be mutually exclusive
 - output extensions should automatically be .s19 or .bin respectively

MBED Support:

- Everything works as advertised EXCEPT the serial port function. This IS visible in the device manager and in the “Devices and Printers” dialog, but our Windows application is unable to connect.

Segger Support:

- Works as advertised.
- I miss drag and drop support

P&E V1.0 Support:

- Beautiful, easy to use. But I can't figure out how to replicate it on newer boards.

P&E V2.0 Support:

- Latest Firmware for OpenSDA is available from www.pemicro.com/opensda. The release is dated 26 August 2014.
- Depending upon the board, use either DEBUG-FRDM-K64F_Pemicro_v108a_for_OpenSDA_v2.0.bin or DEBUG-FRDM-K64F_Pemicro_v108a_for_OpenSDA_v2.1.bin as your OpenSDA application
- **I have not been able to get either of the above to work properly**
- **According to Erich: CodeWarrior does not support this OpenSDA for K64F.** You have to use a hardware programmer to program the board, or use drag&drop of .bin file

With all the tool changes, we have a LOT of options to support:

Base Boards:

- KL25Z
- KL26Z
- KL46Z
- K20D50M
- K64F

Sensor Boards:

- FRDM-FXS-9AXIS (wired only)
- FRDM-FXS-MULTI (wired only)
- FRDM-FXS-MULTI-B (wired OR standard Bluetooth)

Standard sensor fusion options on all of the above:

- accelerometer only
- 2D magnetometer
- gyro only
- accel + mag (eCompass)
- accel + mag (Kalman Filter)
- 9-axis Kalman filter

In addition, for the KL46Z only, we have an additional bare-metal eCompass which does not use MQXLITE.

With this release, we are supplying both CodeWarrior and KDS projects AND moving beyond P&E OpenSDA V1.0 to various debug options outlined above for K64F.