

Development Kit Setup with SDIO Host DVK-ST60-2230C/DVK-SU60-2230C

Application Note

v1.0

INTRODUCTION

Laird provides two kinds of development kits, DVK-ST60-2230C and DVK-SU60-2230C, for the 60-series M.2 module. DVK-ST60-2230C is for product family ST60 with M.2 form factor and DVK-SU60-2230C is for SU60 M.2 module as well.

The IO Voltage defined in M.2 for SDIO is 1.8V so SDIO host needs to be configured IO as 1.8v

DEVELOPMENT KIT PACKAGE CONTENTS

- DVK-ST60-2230C or DVK-SU60-2230C board (1)
- SDIO extender with pin header (1)
- SDIO extender without pin header (1)
- Rainbow cable (1)
- Power adaptor (1)
- FlexPIFA antennas (P/N 001-0016) (2)
- Miscellaneous (such as serial UART cable, USB micro-cable, insert card, etc.)

ENVIRONMENT SETUP WITH THE SDIO HOST

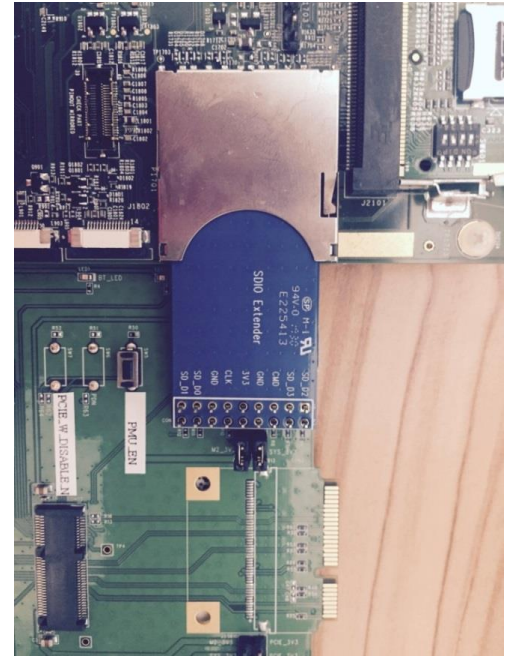
DVK-ST60-2230C/DVK-SU60-2230C Wiring

To wire the DVK-ST60-2230C/DVK-SU60-2230C with SDIO host, follow these steps:

1. Mount the SDIO extender board without pin header onto the DVK-ST60-2230C/DVK-SU60-2230C SDIO connector. The pin closest to the edge of the development kit board should be aligned with the SD_D2 pin of the SDIO extender board.



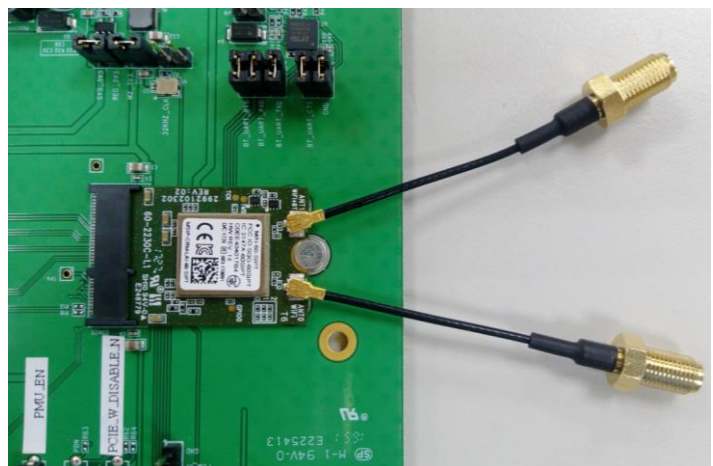
2. Before soldering each pin of the SDIO extender board, ensure that you're able to plug the extender into your host SDIO slot.



3. Plug the ST60-2230C/SU60-2230C M.2 module into the DVK-ST60-2230C/ DVK-SU60-2230C M.2 slot.



4. Connect the two antennas to the u.FL connectors on the DVK-ST60-2230C/ DVK-SU60-2230C board.



DVK-ST60-2230C/DVK-SU60-2230C Board Switch and Jumper Setup

For regular usage, the power from SDIO bus should be enough with no need for external power from either the DC jack or USB port. To run continuous TX in a regulation test, the host may not be able to support enough current via the SDIO and may need external power.

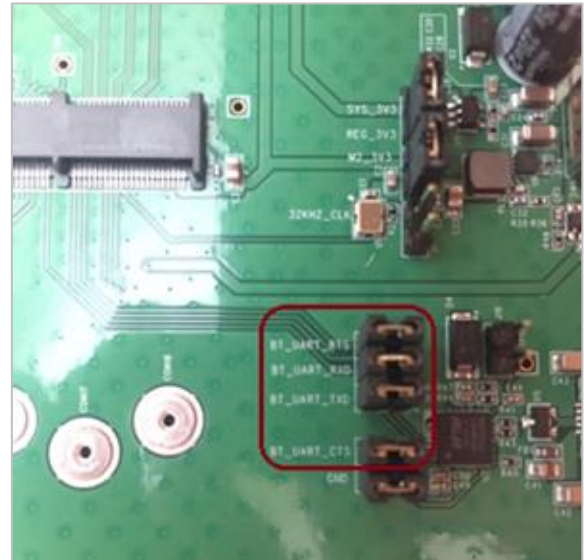
To have power from the SDIO slot, you must have two jumpers in J4.



To have power from the USB or DC jack, you must have jumpers in J5 and J8.



Jumpers 15, 16, 17, and 18 are for Bluetooth pin-out via a UART interface.



REVISION HISTORY

Version	Date	Notes	Approver
1.0	07 Sept 2017	Initial release	Jay White