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CLRC663ARD board quickstart guide

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Document information

Information	Content
Keywords	CLRC663
Abstract	Description of CLRC663ARD board

Revision history		
Rev	**Date**	**Description**
1.0	20200203	First release

1   Introduction

The purpose of this document is to describe how to use CLEV663ARD board. It provides an easy way to evaluate NFC features.

2   Hardware Description

This chapter describes hardware parts of the CLRC663 *plus* based Arduino interface board.

2.1   CLRC6630ARD board

CLEV663ARD add-on board provides NFC reader functionality and it is designed to be used with with any boards compatible with Arduino header, including most LPCXpresso, Kinetis and i.MX boards.

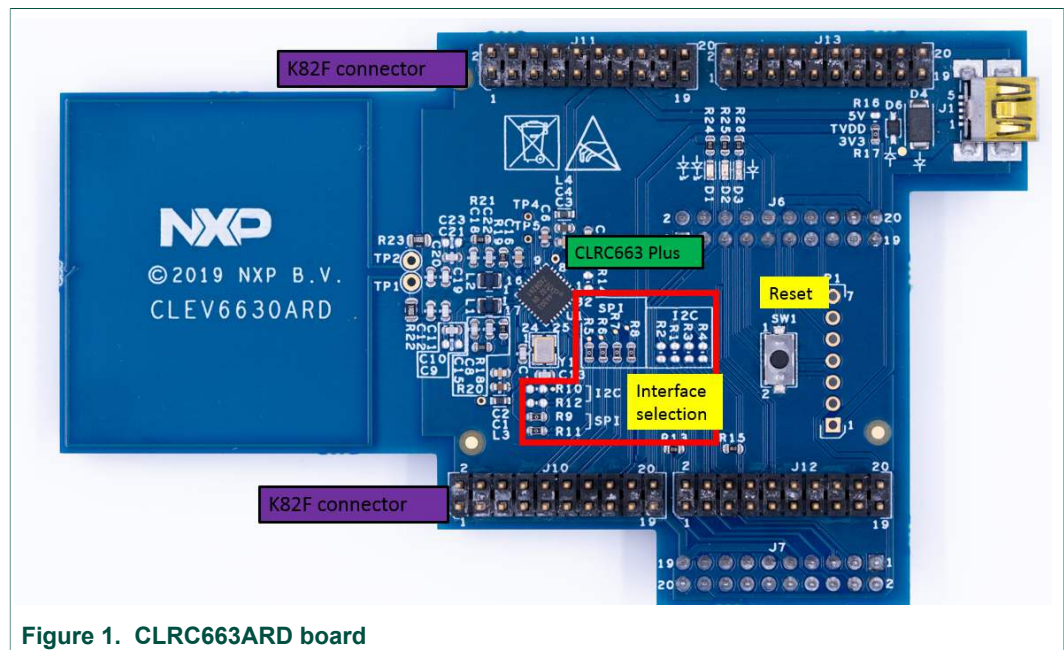Figure below shows the board and main components.

Figure 1. CLRC663ARD board

2.2   Interface selection

CLEV663ARD add-on board provides SPI and I²C host interface connections. The table below shows the configuration for SPI and I²C interface. The default interface is SPI (marked in Green in below table).

Table 1. Interface selection

Resistor	SPI	I²C
R1	open	0 Ohm (closed)
R2	open	0 Ohm (closed)
R3	open	0 Ohm (closed)
R4	open	0 Ohm (closed)

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Resistor	SPI	I²C
R5	0 Ohm (closed)	open
R6	0 Ohm (closed)	open
R7	0 Ohm (closed)	open
R8	0 Ohm (closed)	open
R9	0 Ohm (closed)	open
R10	open	0 Ohm (closed)
R11	0 Ohm (closed)	open
R12	open	0 Ohm (closed)

2.3 Schematics

The complete schematics of the CLEV663ARD add-on board are shown in following figures:
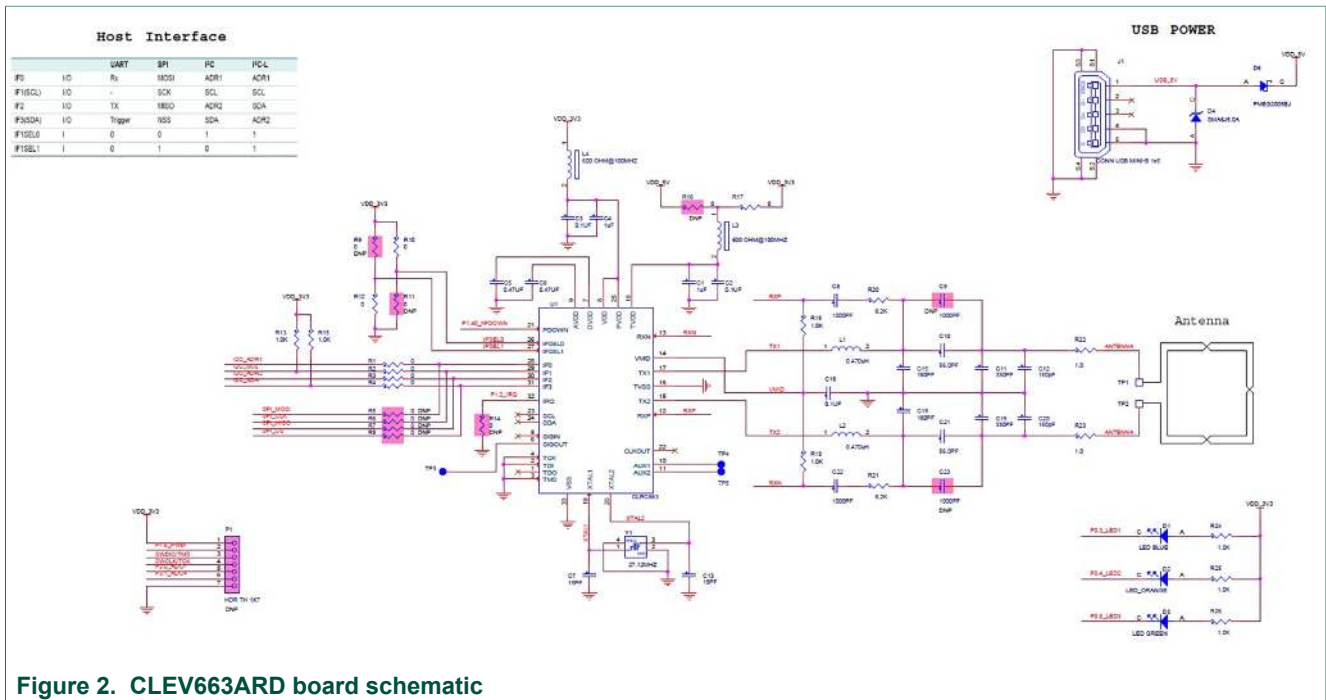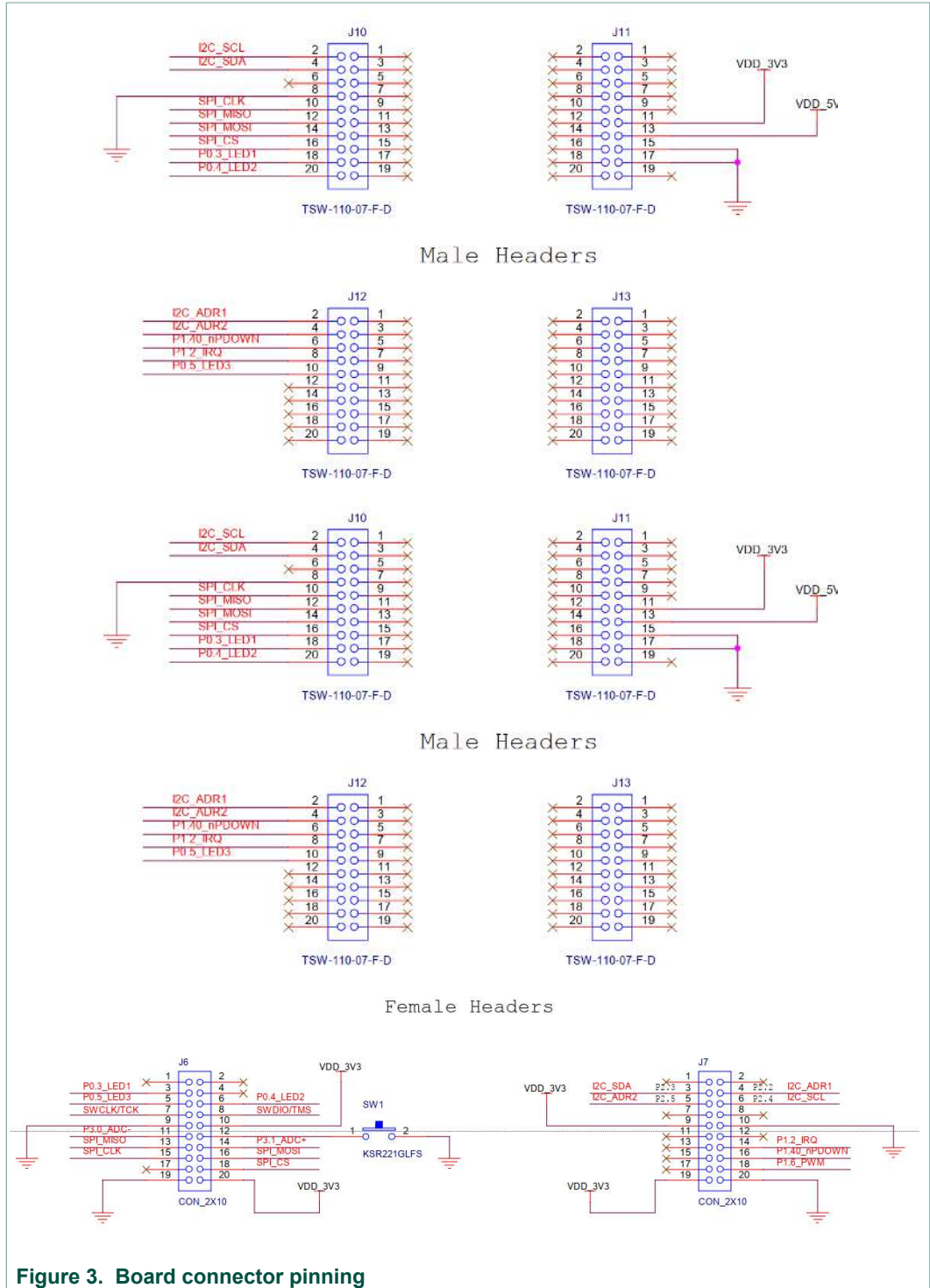
2.3.1 Main Schematics

Figure 2. CLEV663ARD board schematic

2.3.2 Board connectors

Figure 3. Board connector pinning

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3 Software

Following combinations have been tested

The software download (NFC Reader Library - Software support for NFC Frontend solutions) is available on www.nxp.com

Following boards can be used in combination with software package

- Kinetis K82F
- QN9020

Optional: (software not tested)

- connectors also fit for Arduino board

4 Reference documentation

4.1 Data sheets

1. CLRC663 High performance multi-protocol NFC frontend CLRC663 and CLRC663 *plus*, Product data sheet, https://www.nxp.com/docs/en/data-sheet/CLRC663.pdf

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