

The image displays a detailed PCB layout for a contactless interface. The central component is the IC1 (PN5180), which is connected to various power and signal pins. The layout includes a 27.12MHz crystal (Y1) for the microcontroller, an antenna (ANT1) with dimensions 65x58mm, and a series of jumpers (J1-J5, J19, J20) for configuring the SPI interface. The layout is divided into three main sections: the main circuit, the antenna, and the jumper settings.

CONTACT LESS INTERFACE

JUMPER SETTINGS

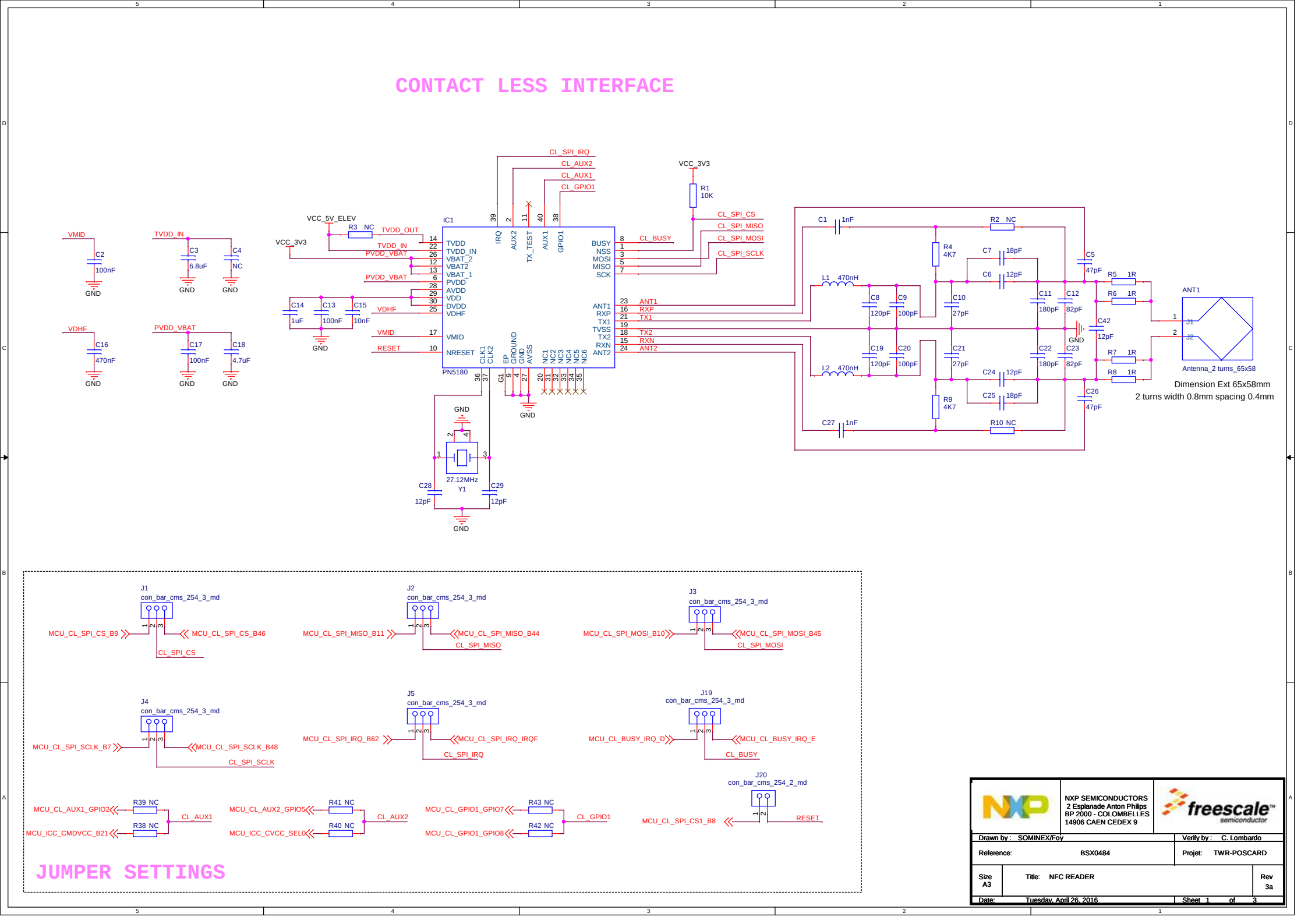
Antenna_2 turns_65x58
Dimension Ext 65x58mm
2 turns width 0.8mm spacing 0.4mm

Legend:

- MCU_CL_SPI_CS_B9 >> MCU_CL_SPI_CS_B46
- MCU_CL_SPI_MISO_B11 >> MCU_CL_SPI_MISO_B44
- MCU_CL_SPI_MOSI_B10 >> MCU_CL_SPI_MOSI_B45
- MCU_CL_SPI_SCLK_B7 >> MCU_CL_SPI_SCLK_B48
- MCU_CL_SPI_IRQ_B62 >> MCU_CL_SPI_IRQ_IRQF
- MCU_CL_BUSY_IRQ_D >> MCU_CL_BUSY_IRQ_E
- MCU_CL_AUX1_GPIO2 << R39 NC
- MCU_CL_AUX2_GPIO5 << R41 NC
- MCU_CL_GPIO1_GPIO7 << R43 NC
- MCU_ICC_CMDVCC_B21 << R38 NC
- MCU_ICC_CVCC_SEL0 << R40 NC
- MCU_CL_GPIO1_GPIO8 << R42 NC
- MCU_CL_SPI_CS1_B8 << RESET

Component Values:

- C1: 1nF, C2: 100nF, C3: 6.8uF, C4: NC, C5: 47pF, C6: 12pF, C7: 18pF, C8: 120pF, C9: 100pF, C10: 27pF, C11: 180pF, C12: 82pF, C13: 100nF, C14: 1uF, C15: 10nF, C16: 470nF, C17: 100nF, C18: 4.7uF, C19: 120pF, C20: 100pF, C21: 27pF, C22: 180pF, C23: 82pF, C24: 12pF, C25: 18pF, C26: 47pF, C27: 1nF, C28: 12pF, C29: 12pF
- R1: 10K, R2: NC, R3: NC, R4: 4K7, R5: 1R, R6: 1R, R7: 1R, R8: 1R, R9: 4K7, R10: NC



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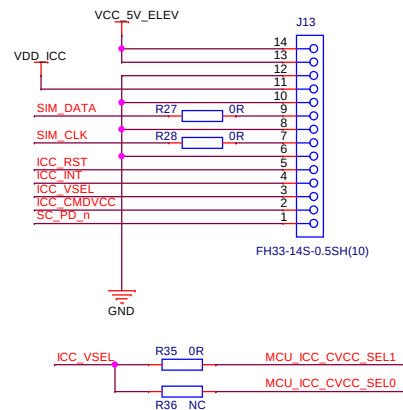
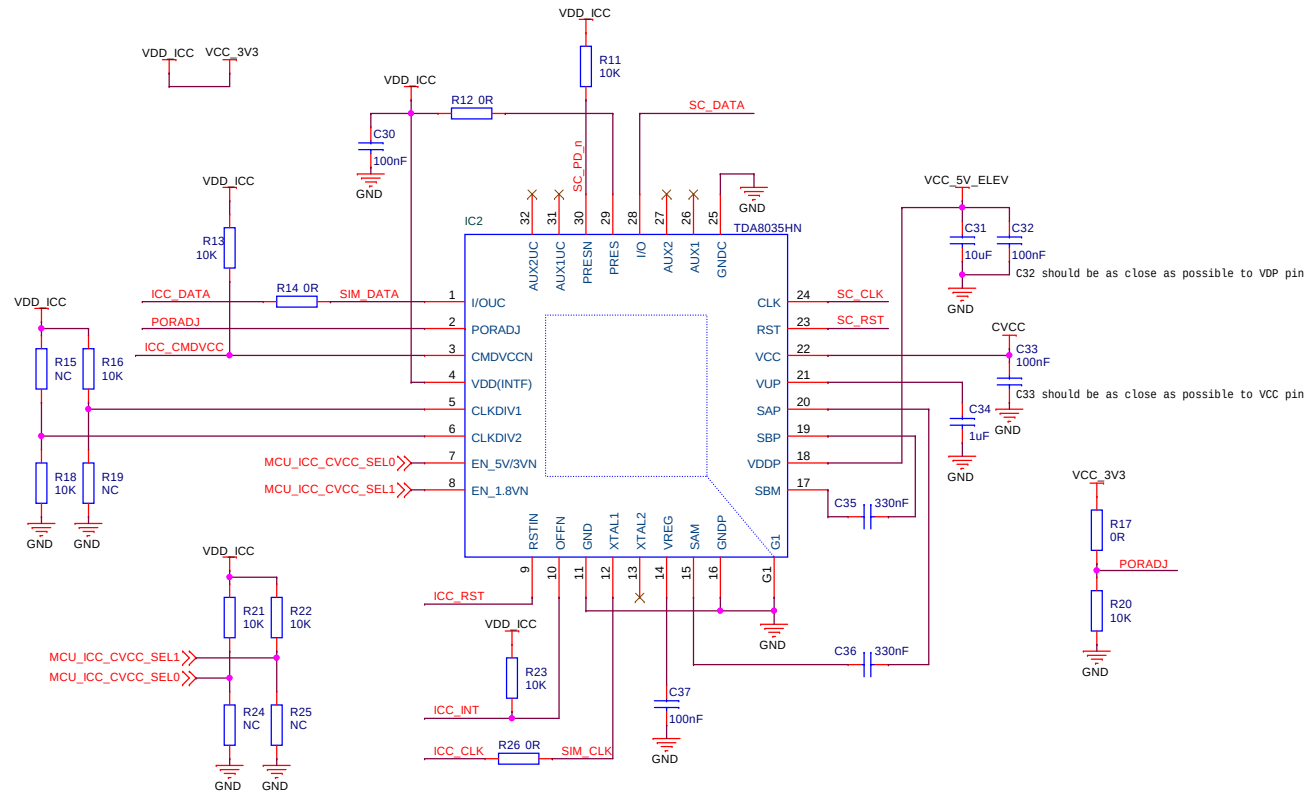
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Component Values:

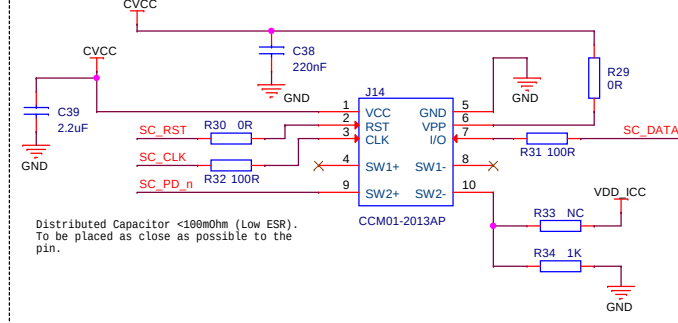
- C1: 1nF, C2: 100nF, C3: 6.8uF, C4: NC, C5: 47pF, C6: 12pF, C7: 18pF, C8: 120pF, C9: 100pF, C10: 27pF, C11: 180pF, C12: 82pF, C13: 100nF, C14: 1uF, C15: 10nF, C16: 470nF, C17: 100nF, C18: 4.7uF, C19: 120pF, C20: 100pF, C21: 27pF, C22: 180pF, C23: 82pF, C24: 12pF, C25: 18pF, C26: 47pF, C27: 1nF, C28: 12pF, C29: 12pF
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SMART CARD INTERFACE

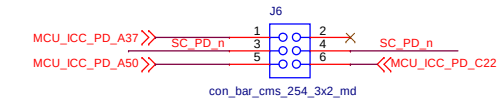


SMART CARD SOCKET

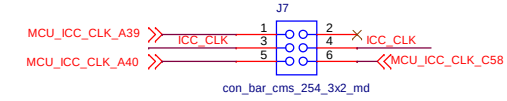
Card Power Supply:
Depending on VSEL lines of the Phy - TDA8035



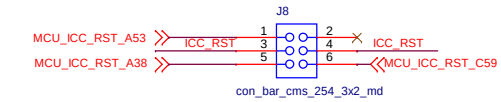
JUMPER SETTING



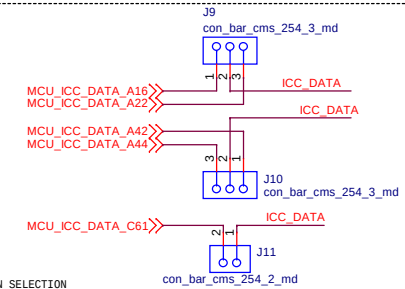
ELEVATOR PD PIN SELECTION



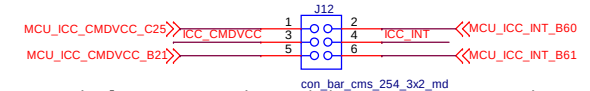
ELEVATOR CLK PIN SELECTION



ELEVATOR RST PIN SELECTION



ELEVATOR DATA PIN SELECTION



Note: Single Connector is used due to space constraint, If space allows we can make it two separate connectors after placement.

ELEVATOR IRQ PIN SELECTION

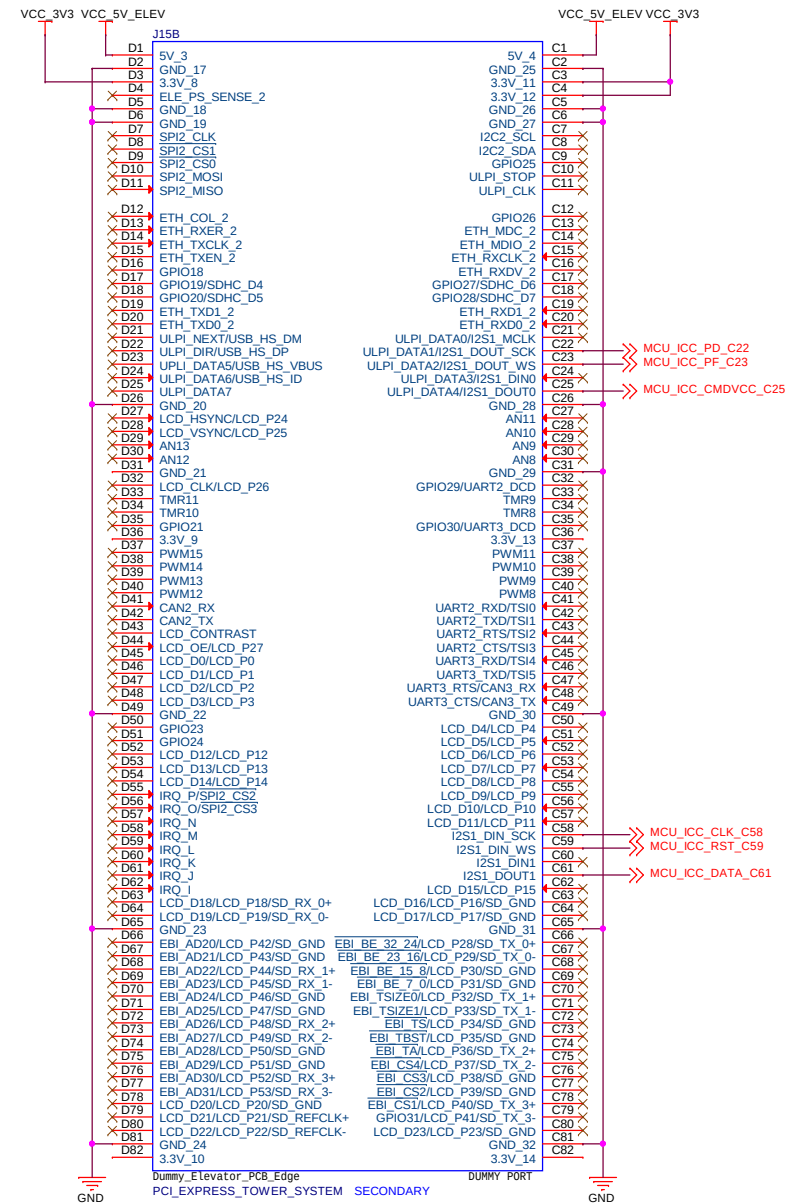
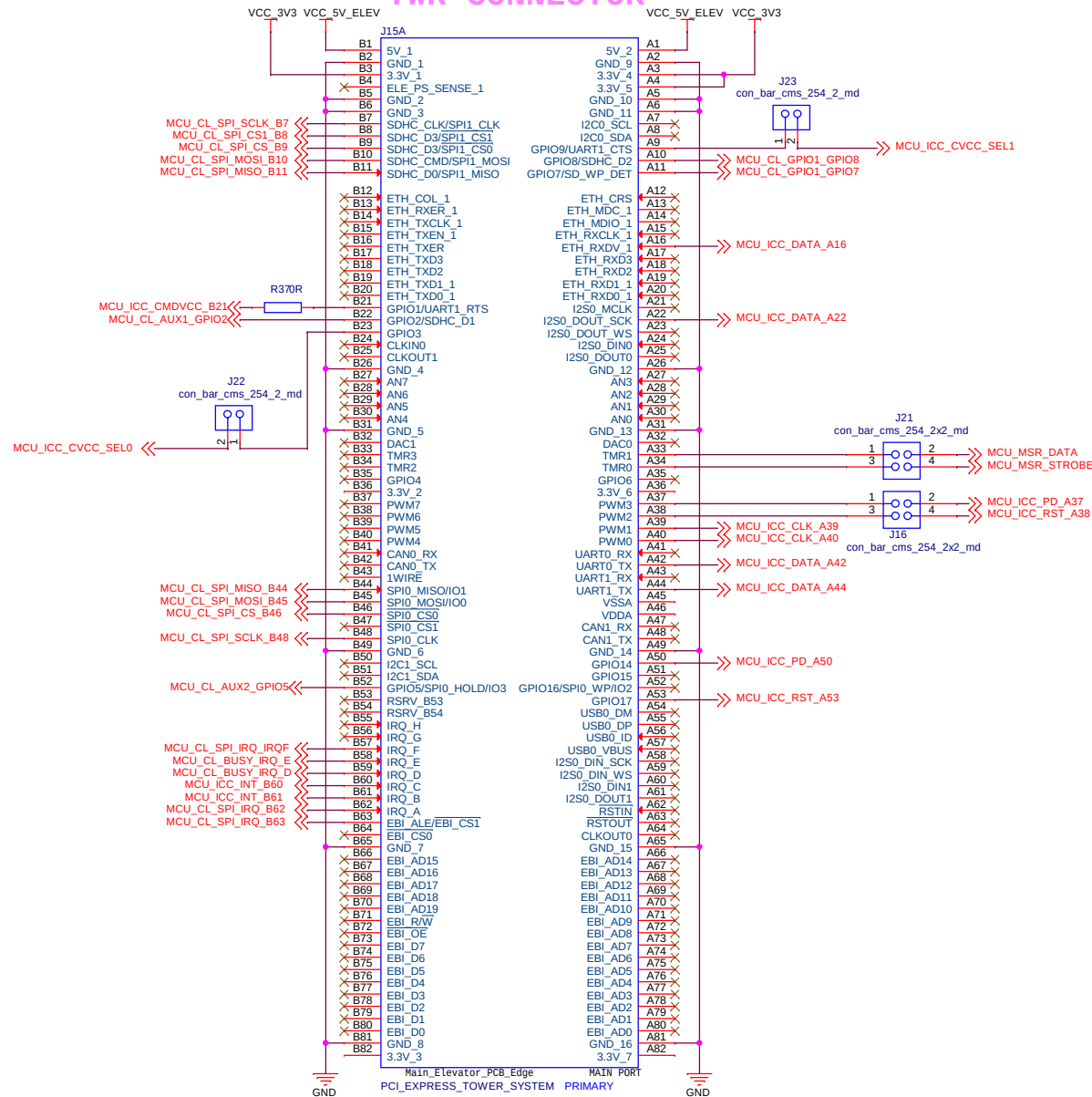
Jumper table

HDR	JUMPER SETTINGS
J1	1-3 or 3-5 or 4-6
J2	1-3 or 3-5 or 4-6
J3	1-3 or 3-5 or 4-6
J7	(1-3 or 3-5) and (2-4 or 4-6)

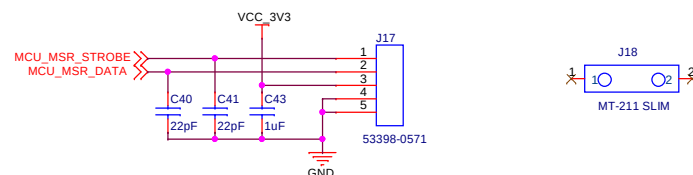
CAV_QTE16
2.54mm

Drawn by: SOMINEX/Foy		Verify by: C. Lombardo	
Reference: BSX0484		Projet: TWR-POSCARD	
Size A3	Title: SMART CARD READER		Rev 3a
Date: Tuesday, April 26, 2016		Sheet 2 of 3	

TWR CONNECTOR



MAGNETIC STRIPE READER INTERFACE



	NXP SEMICONDUCTORS 2 Esplanade Anton Philips BP 2000 - COLOMBELLES 14906 CAEN CEDEX 9	
Drawn by: SOMINEX/Fov	Verify by: C. Lombardo	
Reference: BSX0484	Projet: TWR-POSCARD	
Size A3	Title: TWR CONNECTORS	
Date:	Tuesday, April 26, 2016	Sheet 3 of 3