PAGE	DESCRIPTION
01	INDEX
02	MCU - I/O PINOUT
03	MCU - POWER
04	MCU - OTHER CONNECTIONS (USB, CRYSTAL, JTAG...)
05	POWER
06	IO FUNCTION SELECTION
07	UART - USB
08	MEMORY - SD
09	ETHERNET
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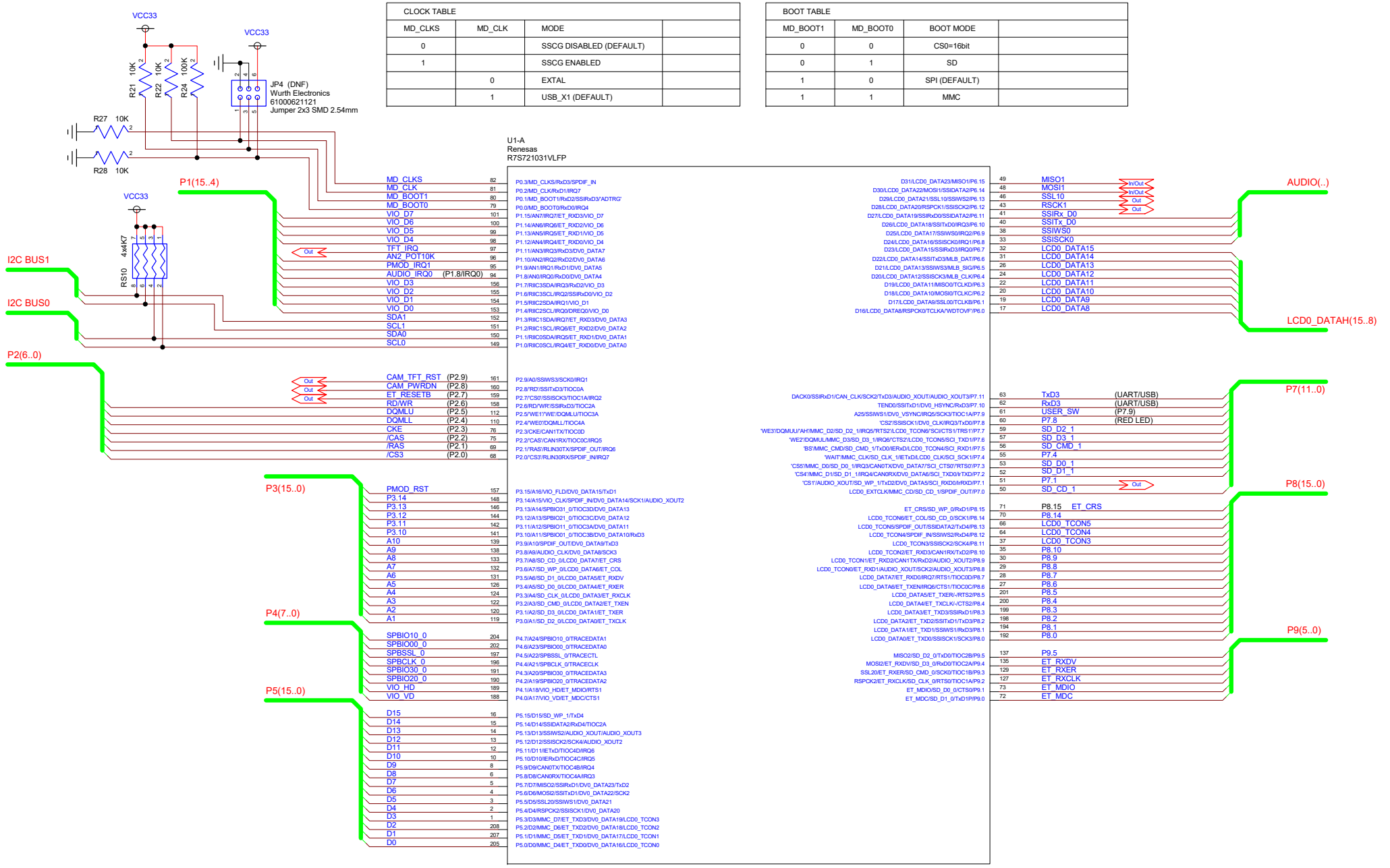
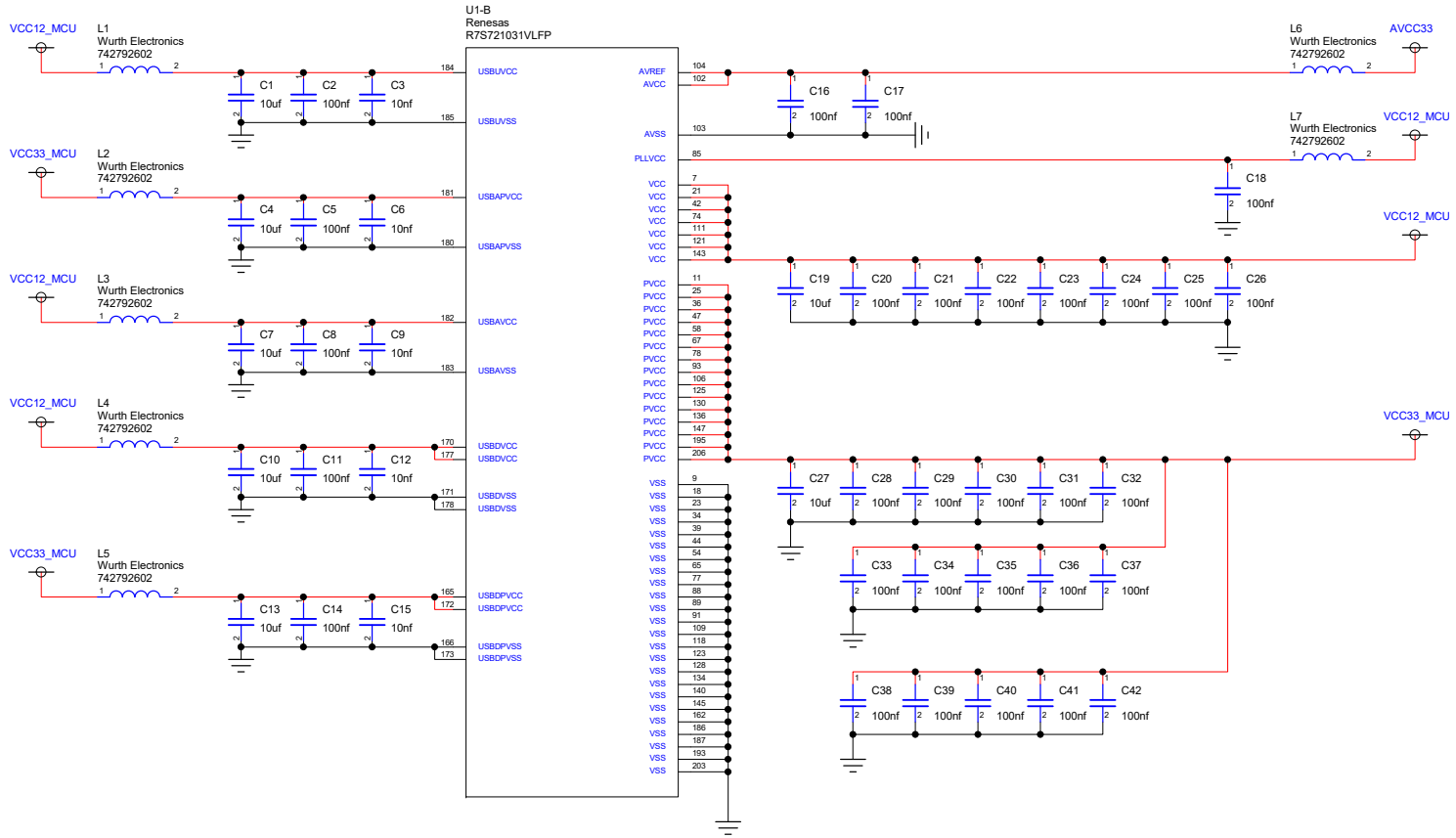
PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT			DRAWN BY	PATRICK S.	DATE	2016.08.10
PAGE	INDEX			APPROVED BY	TOLENTINO M.	DATE	
REFERENCE	VERSION	REV	REMARKS		DATE	SIZE	SHEET
REN0001 1402	V2.3		DNF : Dot Not Fit		2017.09.25	A4	01 OF 13

CLOCK TABLE			
MD_CLKS	MD_CLK	MODE	
0		SSCG DISABLED (DEFAULT)	
1		SSCG ENABLED	
	0	EXTAL	
	1	USB_X1 (DEFAULT)	

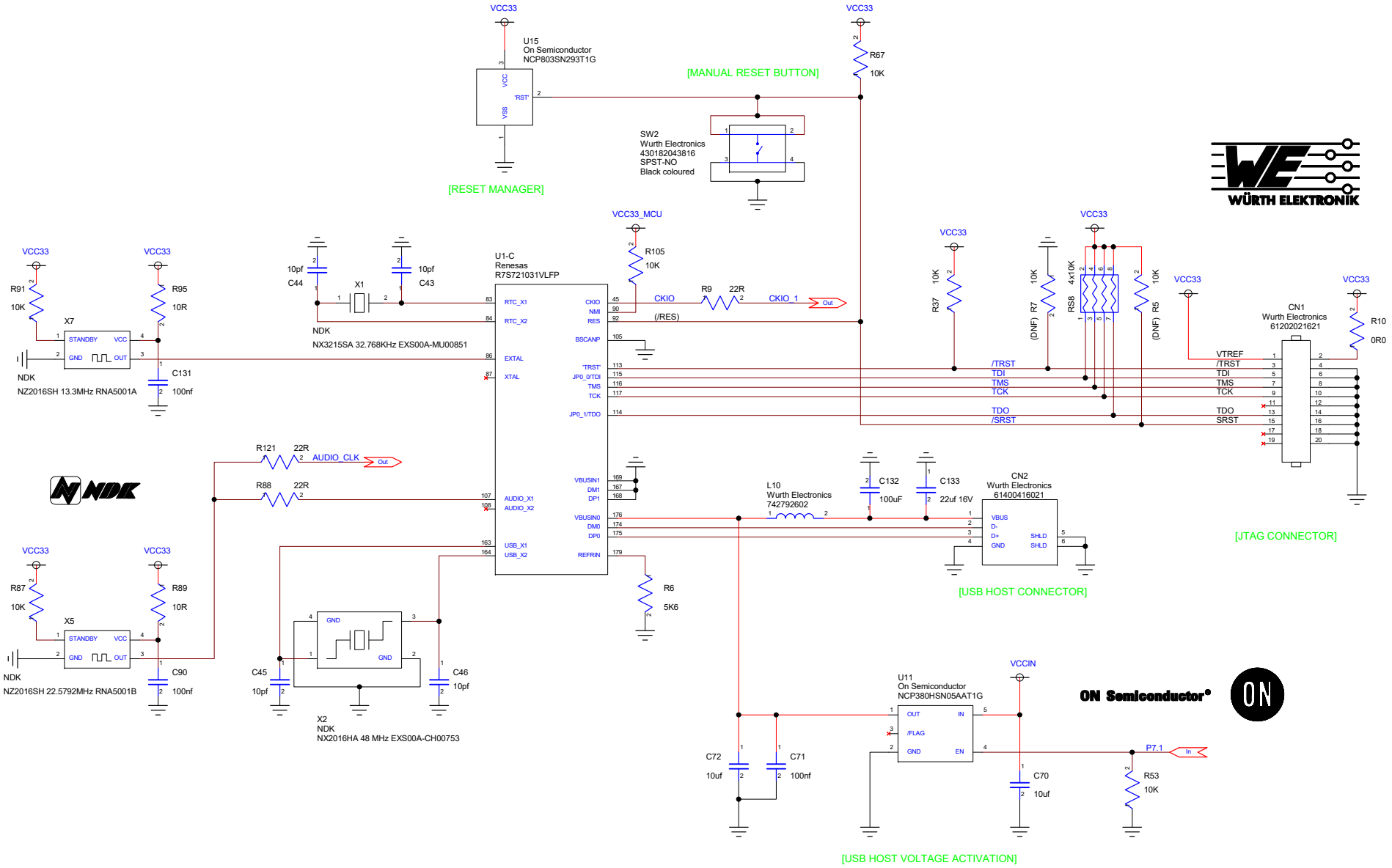
BOOT TABLE			
MD_BOOT1	MD_BOOT0	BOOT MODE	
0	0	CS0=16bit	
0	1	SD	
1	0	SPI (DEFAULT)	
1	1	MMC	



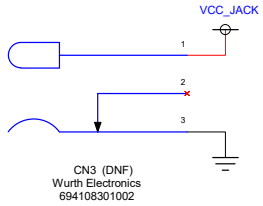
Owned by RENESAS www.renesas.eu	PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT		DRAWN BY	PATRICK S.	DATE	2016.08.10
	PAGE	MCU - I/O		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	02 OF 13



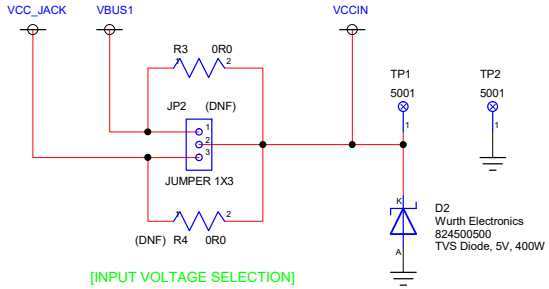
Owned by RENESAS www.renesas.eu	PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT		DRAWN BY	PATRICK S.	DATE	2016.08.10
	PAGE	MCU - POWER		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	03 OF 13



Owned by RENESAS www.renesas.eu	PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT		DRAWN BY	PATRICK S.	DATE	2016.08.10
	PAGE	MCU - OTHER CONNECTIONS		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	04 OF 13



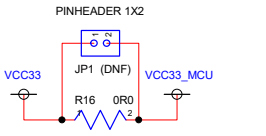
[JACK POWER SUPPLY]
[STRICTLY 5VDC]
[CENTER POSITIVE]



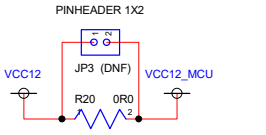
[INPUT VOLTAGE SELECTION]

Note :
JP1 and JP6 are used for the MCU current measurement.

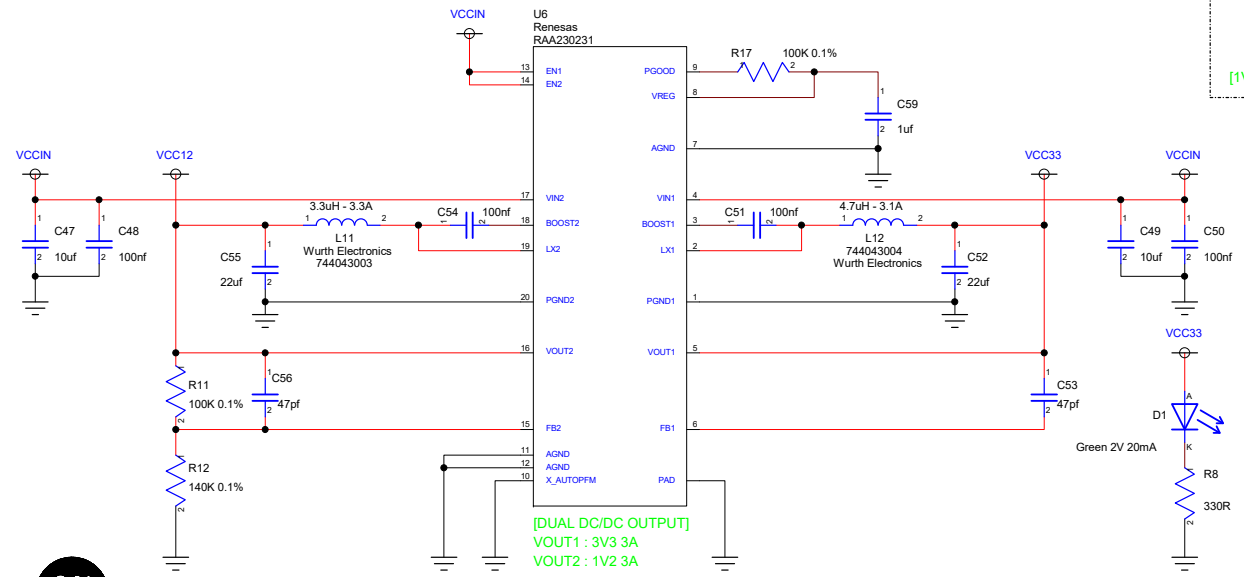
Remove R16 and short JP1 to measure the current consumption for the MCU 3.3V power supply
Remove R20 and short JP3 to measure the current consumption for the MCU 1.18V power supply



[3V3 MCU GENERATION & CURRENT MEASUREMENT]



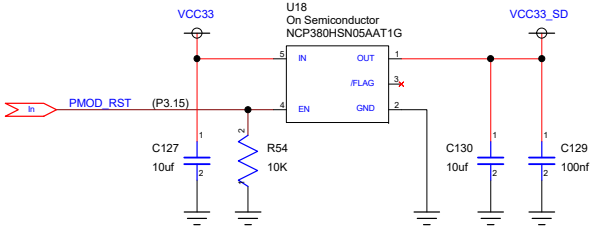
[1V2 MCU GENERATION & CURRENT MEASUREMENT]



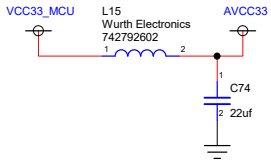
[DUAL DC/DC OUTPUT]
VOUT1 : 3V3 3A
VOUT2 : 1V2 3A

[POWER ON LED]

ON Semiconductor®



[SD-CARD POWER SUPPLY]



[3V3 ANALOG GENERATION]

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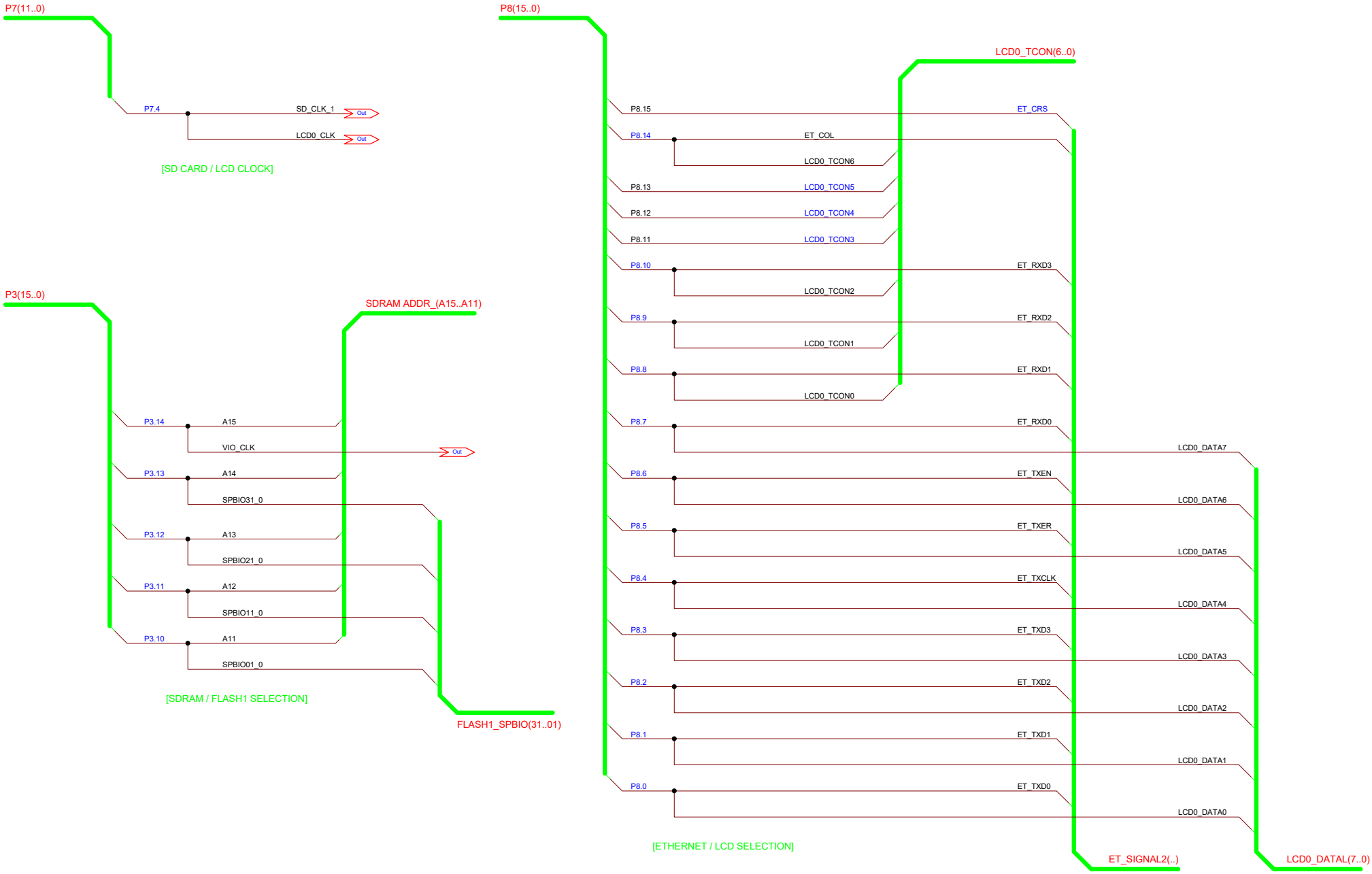
	PAGE	POWER SUPPLY		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	05 OF 13



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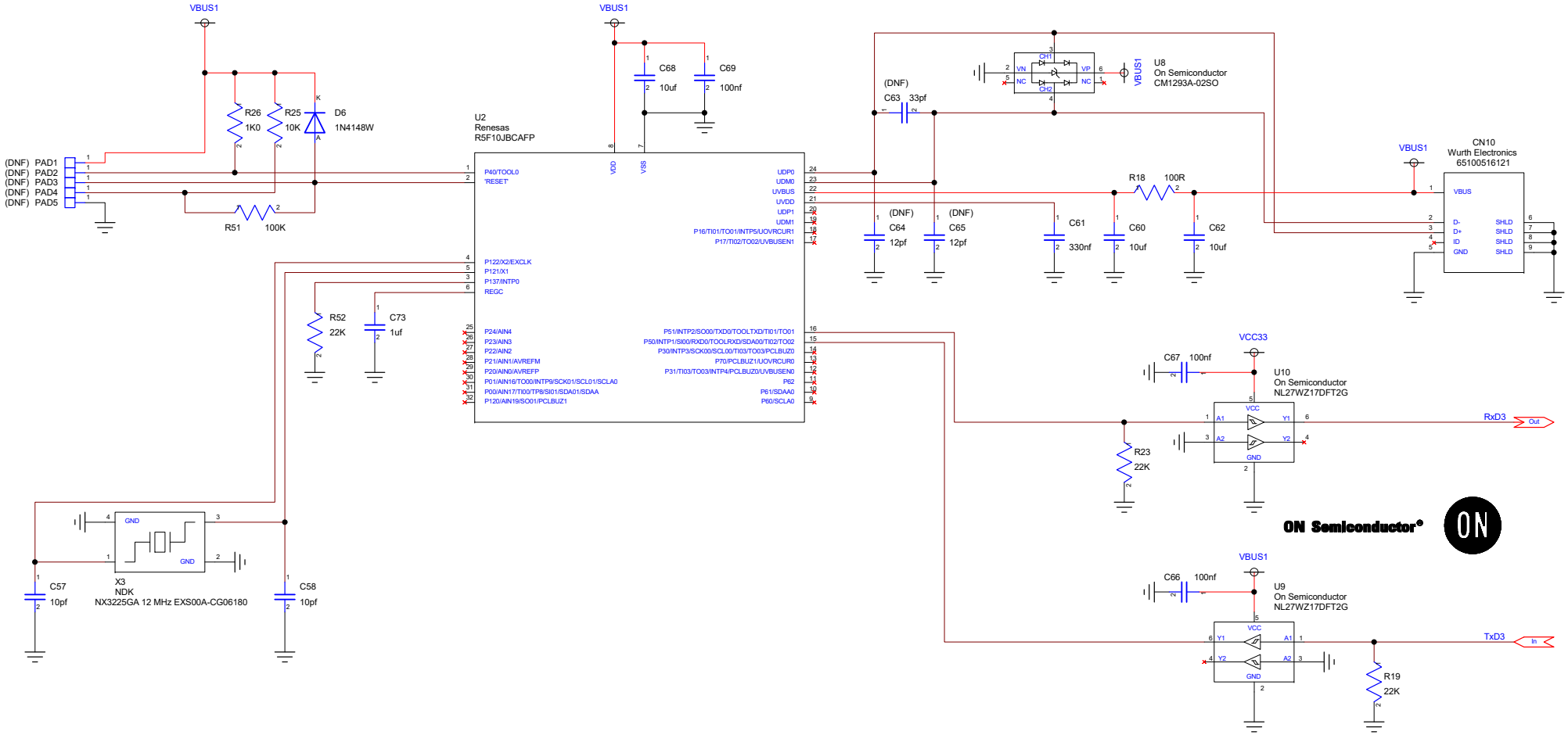
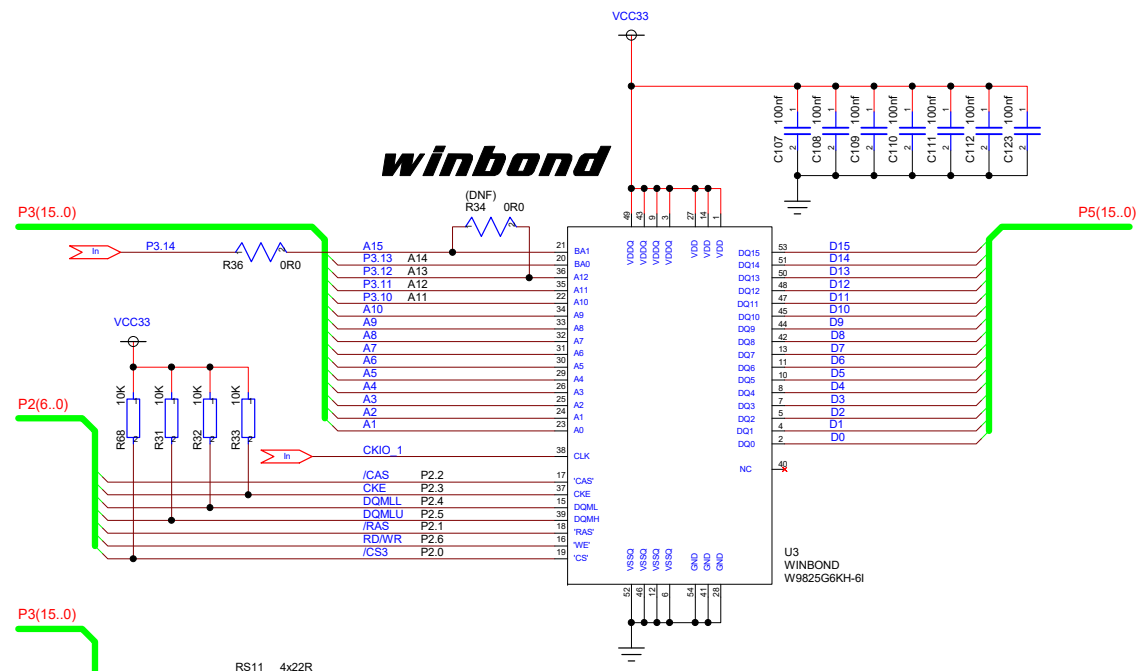
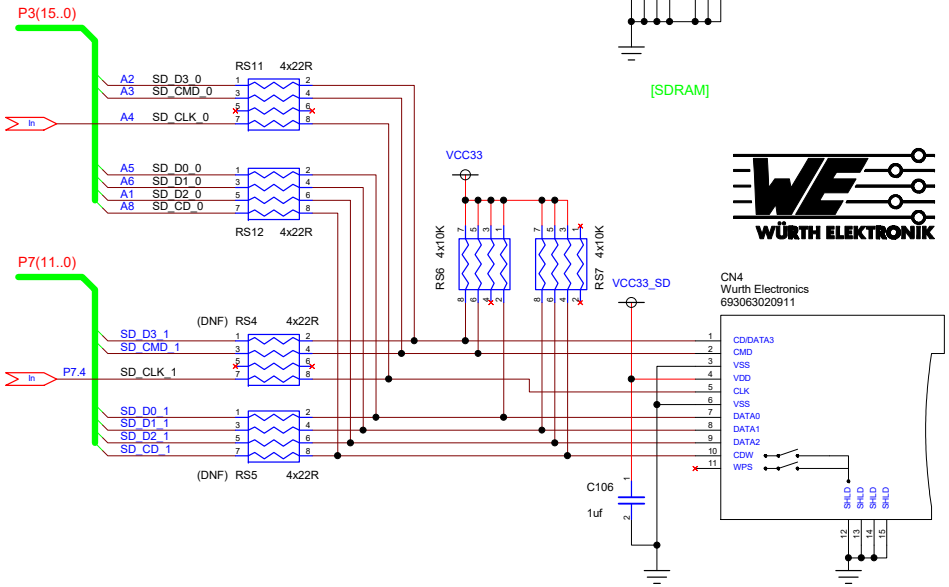
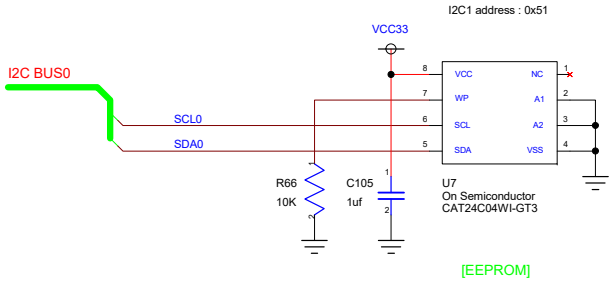
	PAGE	I/O FUNCTION SELECTION		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	06 OF 13

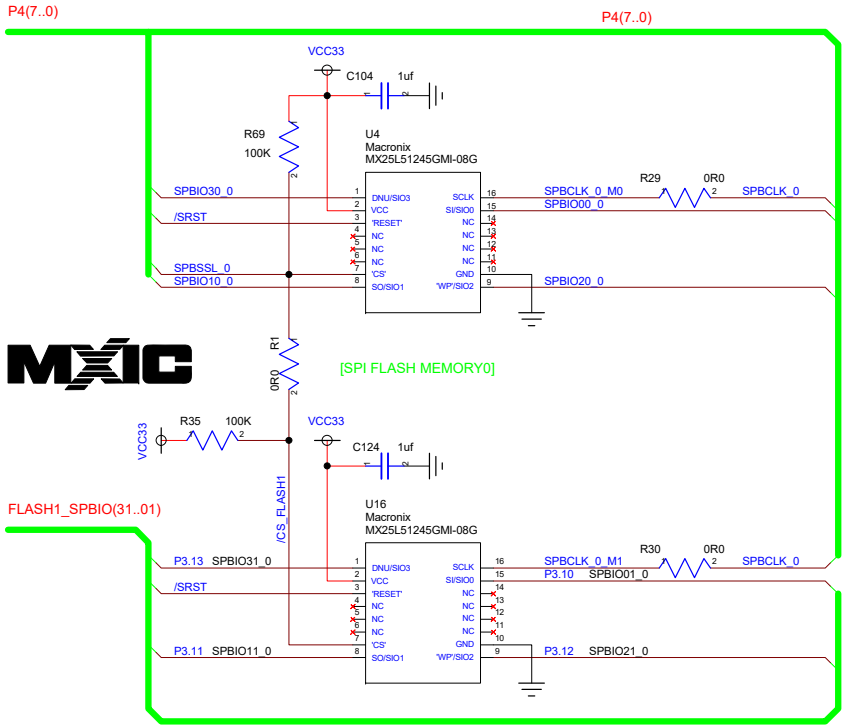


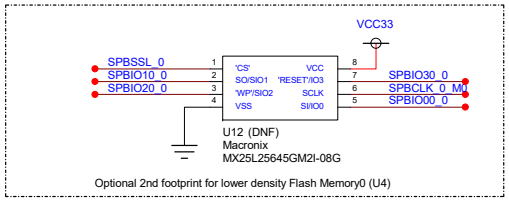
Owned by RENESAS www.renesas.eu	PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT		DRAWN BY	PATRICK S.	DATE	2016.08.10
	PAGE	RL78G1C USB TO SERIAL		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	07 OF 13

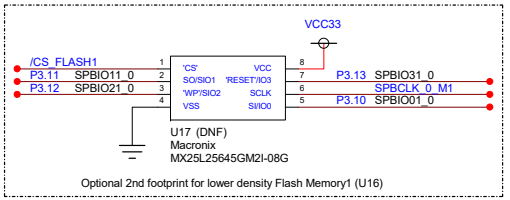












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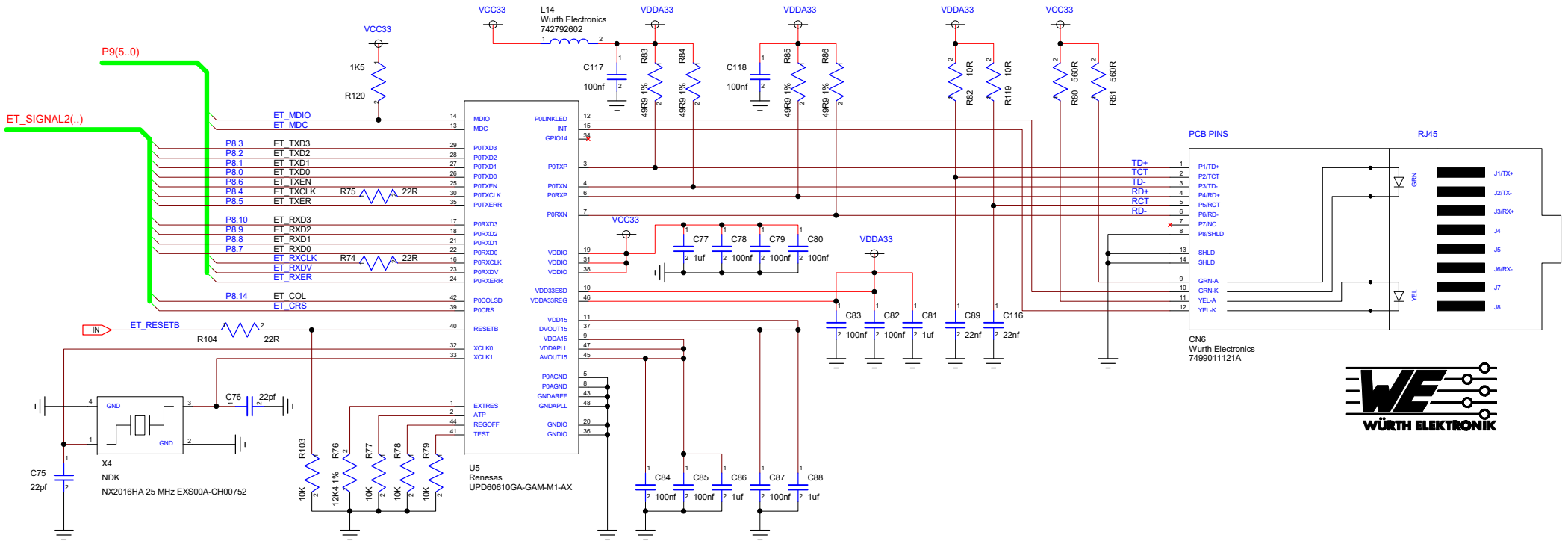
	PAGE	MEMORY - SD CARD		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	08 OF 13



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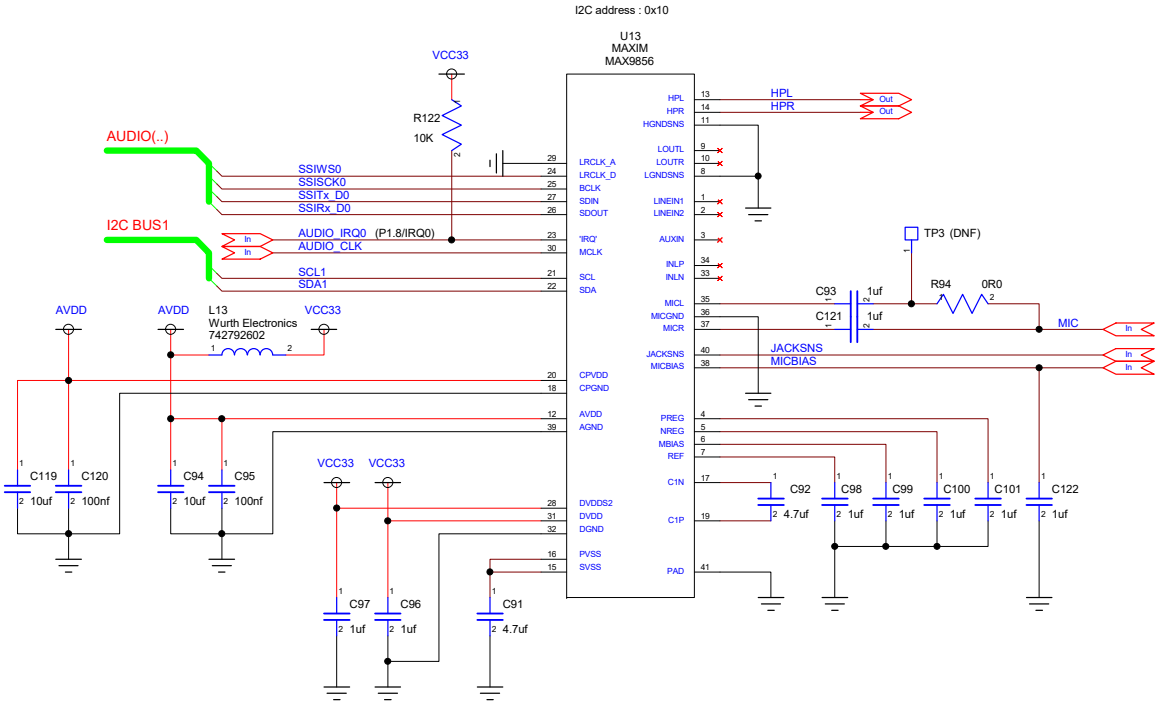
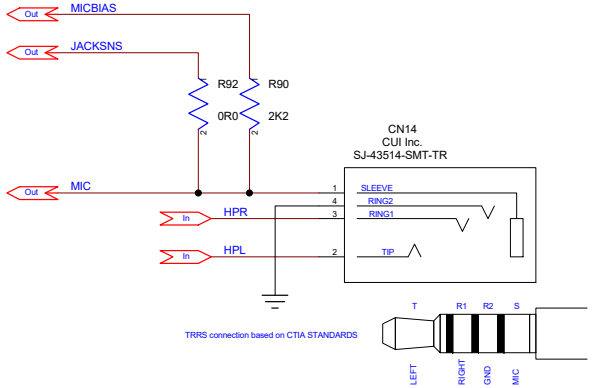
	PAGE	ETHERNET		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	09 OF 13





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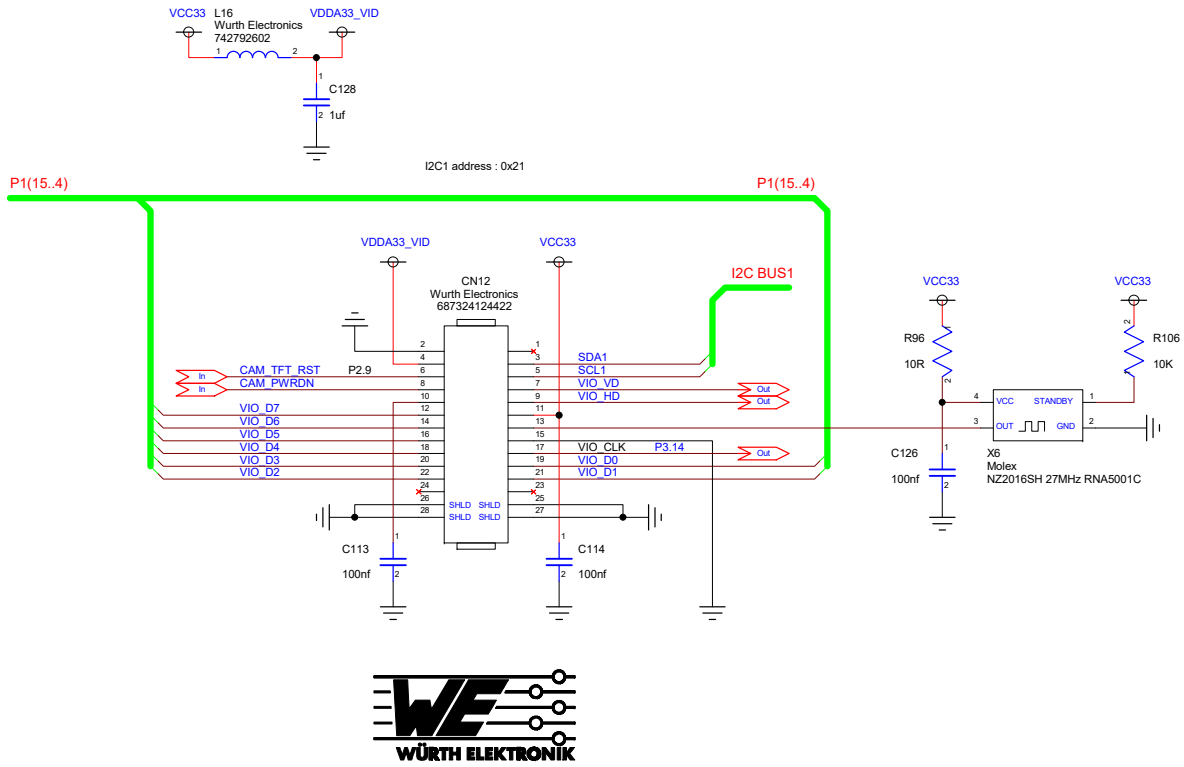
	PAGE	AUDIO		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	10 OF 13



WÜRTH ELEKTRONIK

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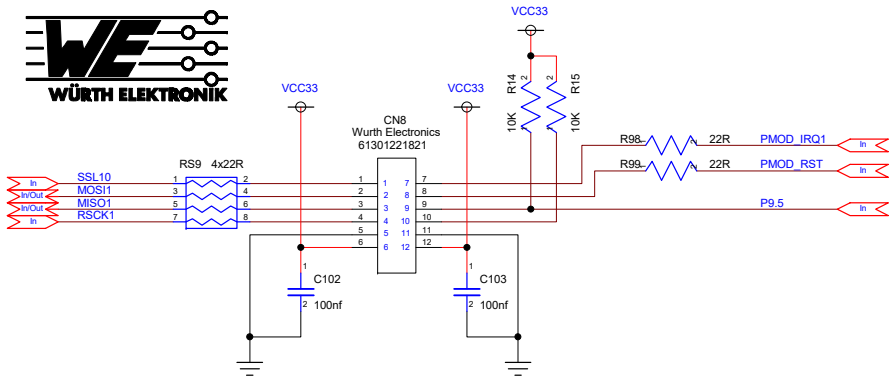
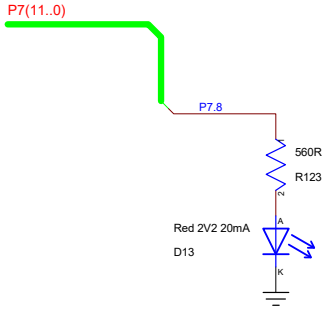
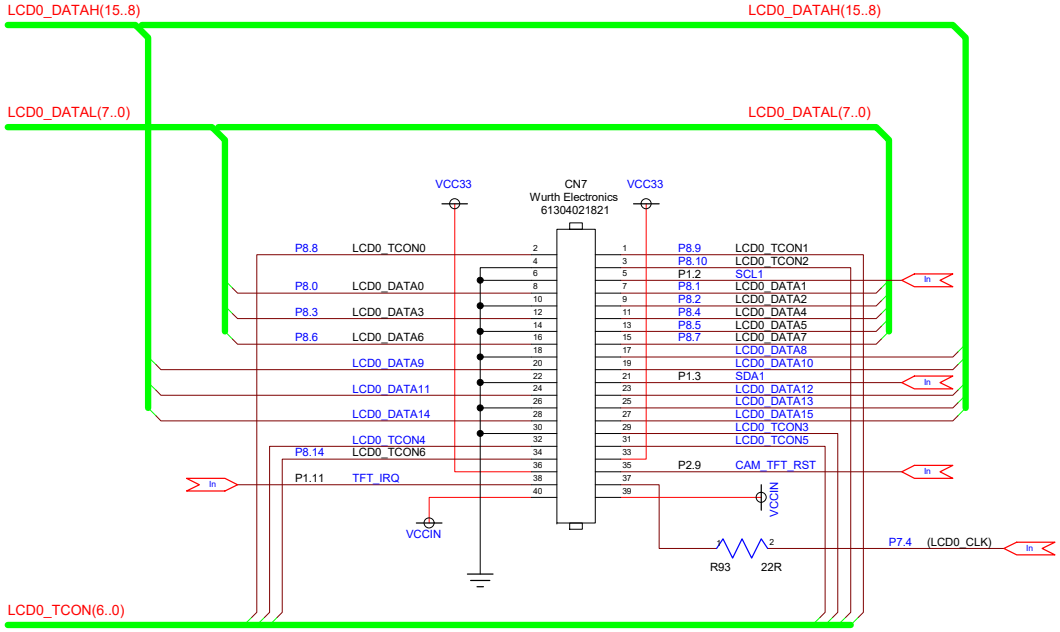
	PAGE	VIDEO			APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS		DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit		2017.09.25	A4	11 OF 13



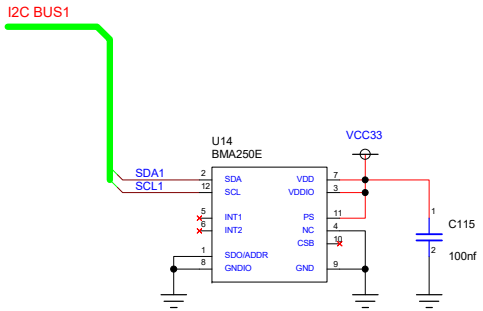
[PMOD CONNECTOR]



[USER LED]

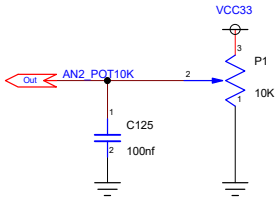


[LCD CONNECTOR]

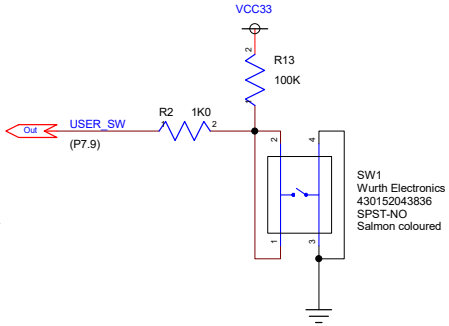


[ACCELEROMETER]

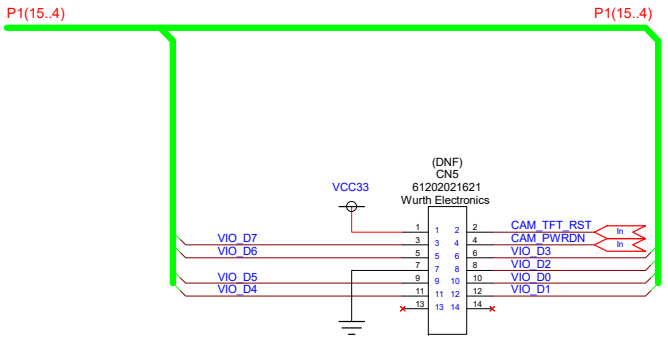
I2C1 address : 0x18



[10K POTENTIOMETER]



[USER SWITCH]



[EXT CN]

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	PAGE	EXTENDED FUNCTIONS		APPROVED BY	TOLENTINO M.	DATE	
Designed by M13design www.m13design.fr	REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
	REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	12 OF 13

VERSION	REVISION	DATE	DESCRIPTION
0.1		2014/08/27	FIRST DRAFT
1.0		2015/08/25	CONNECT RZ (U1) PIN103 TO GND, CONNECT C16 & C17 TO GND
2.0		2016/02/10	ADDED CURRENT CONSUMPTION ON 3V3 AND 1V2, REMOVED RS1/RS3, REPLACED AUDIO/MIC CONNECTORS WITH A SINGLE AUDIO/MIC CONNECTOR, U4 IS MOUNTED BY DEFAULT, DNF DISPLAYED REMOVED PULLUPS ON FLASH I/O, DC/DC AND P1.11 FOR SD CARD, USER SWITCH MOVED TO P7.9, ADDED 13.33MHZ ON EXTAL, JUMPER SELECTION ON BOOT
2.1		2016/08/26	MOVED TFT_IRQ TO P1.11, SD POWER ENABLE PIN SHARED WITH PMOD_RST (P3.15) , UPDATED U4/U16 MPN
2.2		2016/12/06	VBUSIN1 / DM1 & DP1 CONNECTED TO USBDPVSS (GND), C63 / C64 / C65 MARQUED AS DNF, ADDED 22R DAMPING RESISTOR ON BOTH QSPI CLK, CHANGED C61 TO 330NF C73 VALUE CHANGE TO 1UF, 100UF FILTER CAPACITOR ADDED ON USB HOST VBUS + AN EXTRA 0805 FOOTPRINT
2.2	A	2017/02/24	UPDATED U7 FROM CAT24C02WI-GT3 TO CAT24C04WI-GT3, REPLACED R29/R30 WITH 0R RESISTORS
2.3		2017/09/25	GND ON U10.3 & U9.3 / 10K PULL-UP ON CKE, DQMLL, DQMLU, REMOVED DNF STATUS ON C133, C133 VALUE CHANGED TO 22UF-10V / DISCONNECTED VCC33 FROM U7.1 / UPDATED U7.1 PIN DESCRIPTION TO "NC" ADDED R34 0R BETWEEN U3.21 & U3.36 AS DNF / ADDED 100K PULLUP R35 ON U16.7 (/CS) / ADDED R36 INLINE ON P3.14 SIGNAL / R5 AS DNF / ADDED R37 10K PULLUP ON/TRST / R7 AS DNF

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PRODUCT	STREAM-IT - RZ/A1L BOARD LAYOUT			DRAWN BY	PATRICK S.	DATE 2016.08.10
PAGE	REVISION HISTORY			APPROVED BY	TOLENTINO M.	DATE
REFERENCE	VERSION	REV	REMARKS	DATE	SIZE	SHEET
REN0001 1402	V2.3		DNF : Dot Not Fit	2017.09.25	A4	13 OF 13