

REV	REF	DATE	DRAWN BY
1	Trac #2150	24-11-11	OKE
2	Trac #2329	27-03-12	OKE
3	Trac #2451	15-05-12	OKE

# RSK2+SH7269 STARTER KIT SCHEMATICS

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3	MCU 2/3, MCU Decoupling
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5	Bus Switches
6	SDRAM, NOR Flash, QSPI & NAND Flash
7	Main Power Supply
8	E10A, Debug LCD, RS232 & CAN
9	IIC IO Port, Switches, LEDs, Reset & MMC
10	Application Headers
11	TFT Connectors, Touchscreen Controller
12	USB Device & Host, USB Power
13	Ethernet Interface
14	DVI over HDMI Interface & Composite Input
15	Audio CODEC, Audio Input & Output
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## NOTE:

- R** : Resistor
- RV** : Potentiometer
- L** : Inductor
- D** : Diode
- U** : Intergrated Circuit
- X** : Crystal/Oscillator
- RES** : Reset Switch
- SW** : Switch
- LED** : Light Emitting Diode
- PWR** : Power Jack
- J** : Connector

SIZE A4

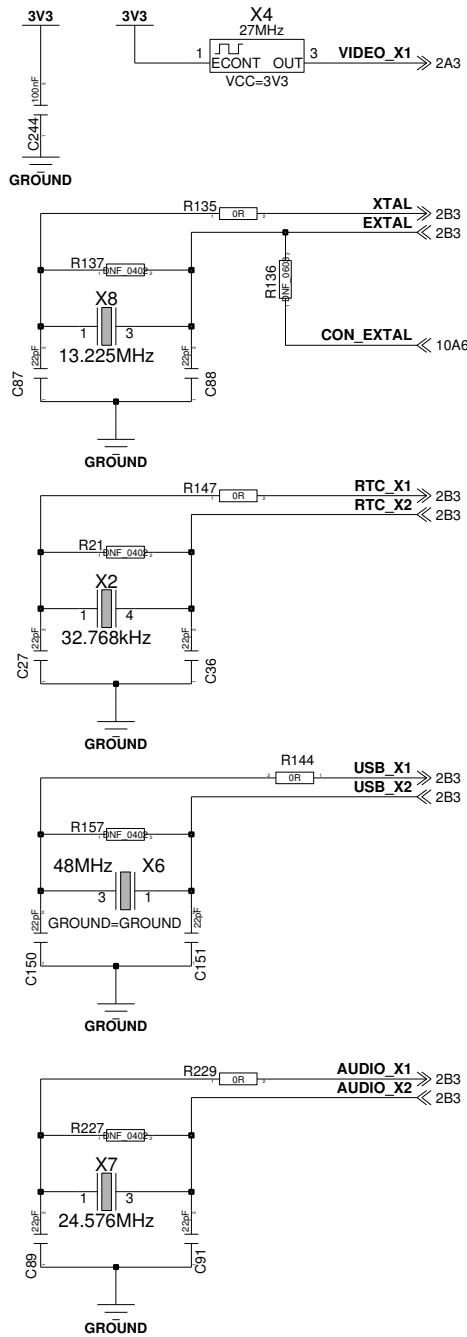
**RENESAS ELECTRONICS EUROPE LTD**  
 Dukes Meadow, Bourne End, Buckinghamshire  
 UNITED KINGDOM

SCHEMATIC TITLE  
**RSK2+SH7269**

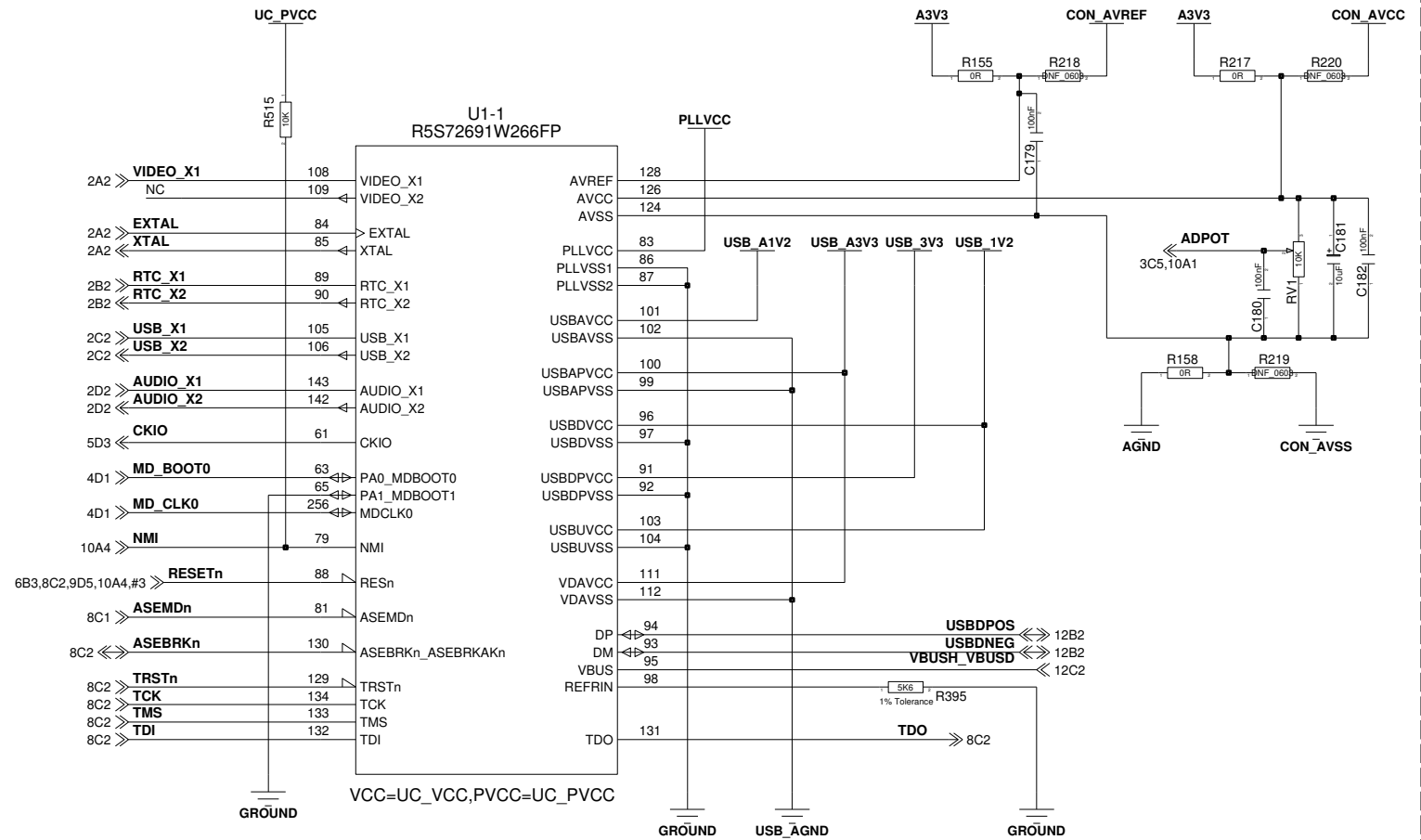
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**Contents**

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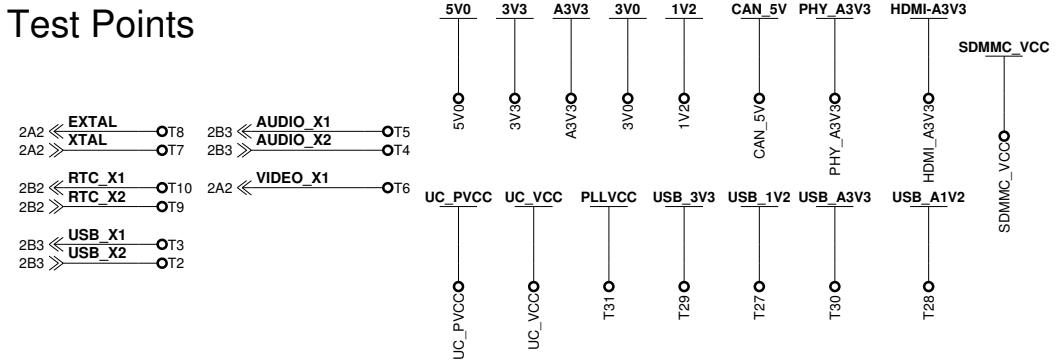
# MCU Crystals/Oscillators



# MCU 1/3



# Test Points



SIZE A4

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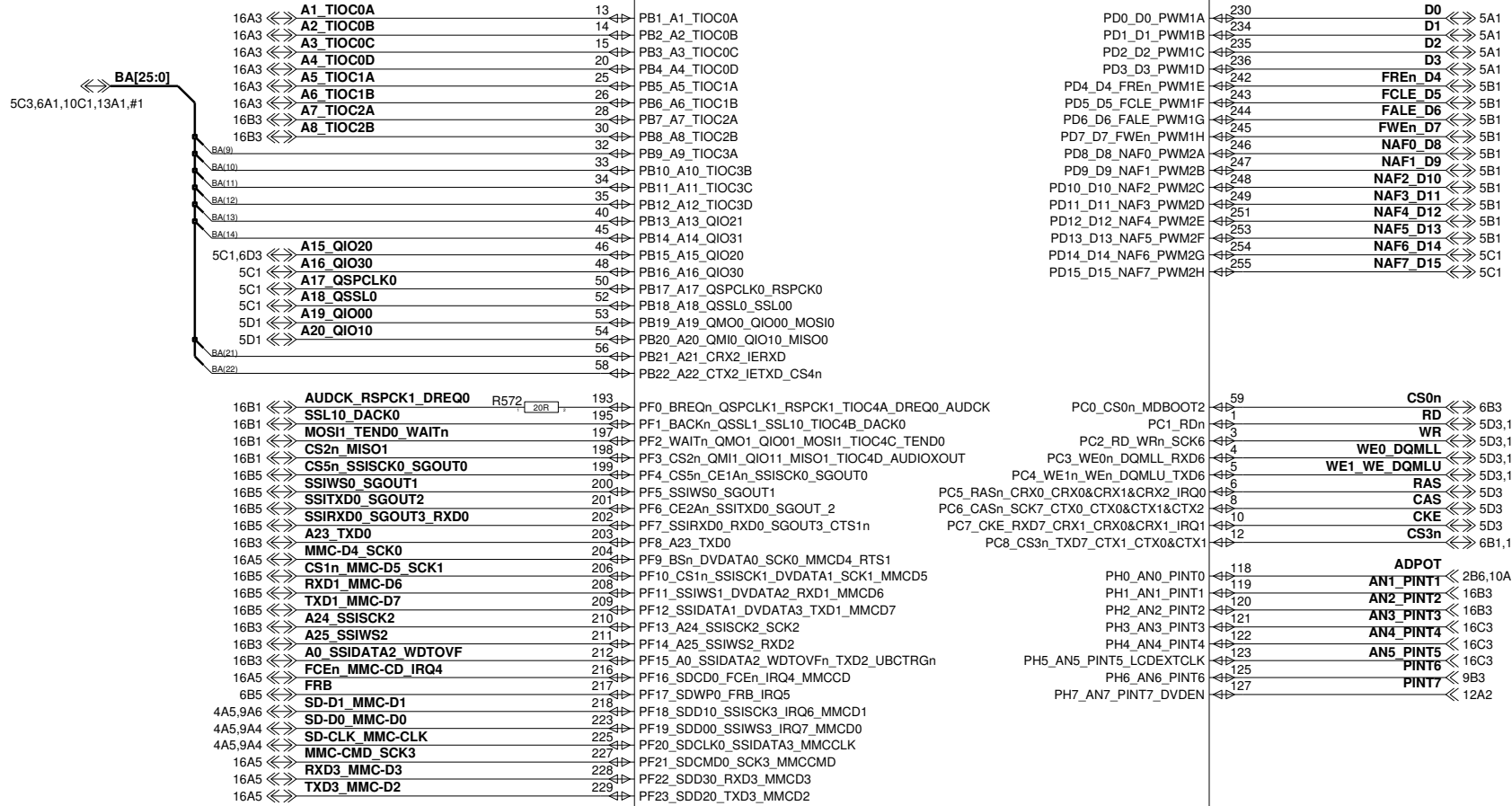
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**RSK2+SH7269**

SHEET TITLE  
**MCU1/3, MCU Crystals/Oscillator**

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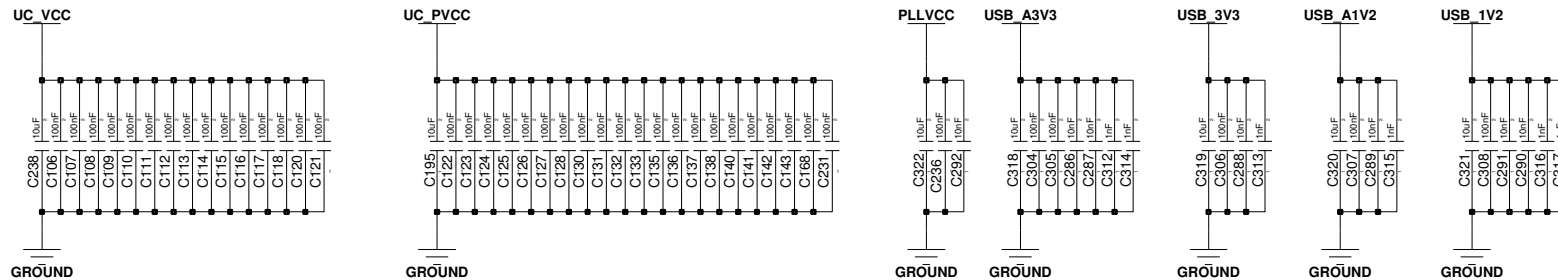
# MCU 2/3

U1-2  
R5S72691W266FP



VCC=UC\_VCC,PVCC=UC\_PVCC

# MCU Decoupling



SIZE A4

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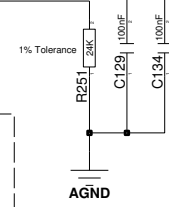
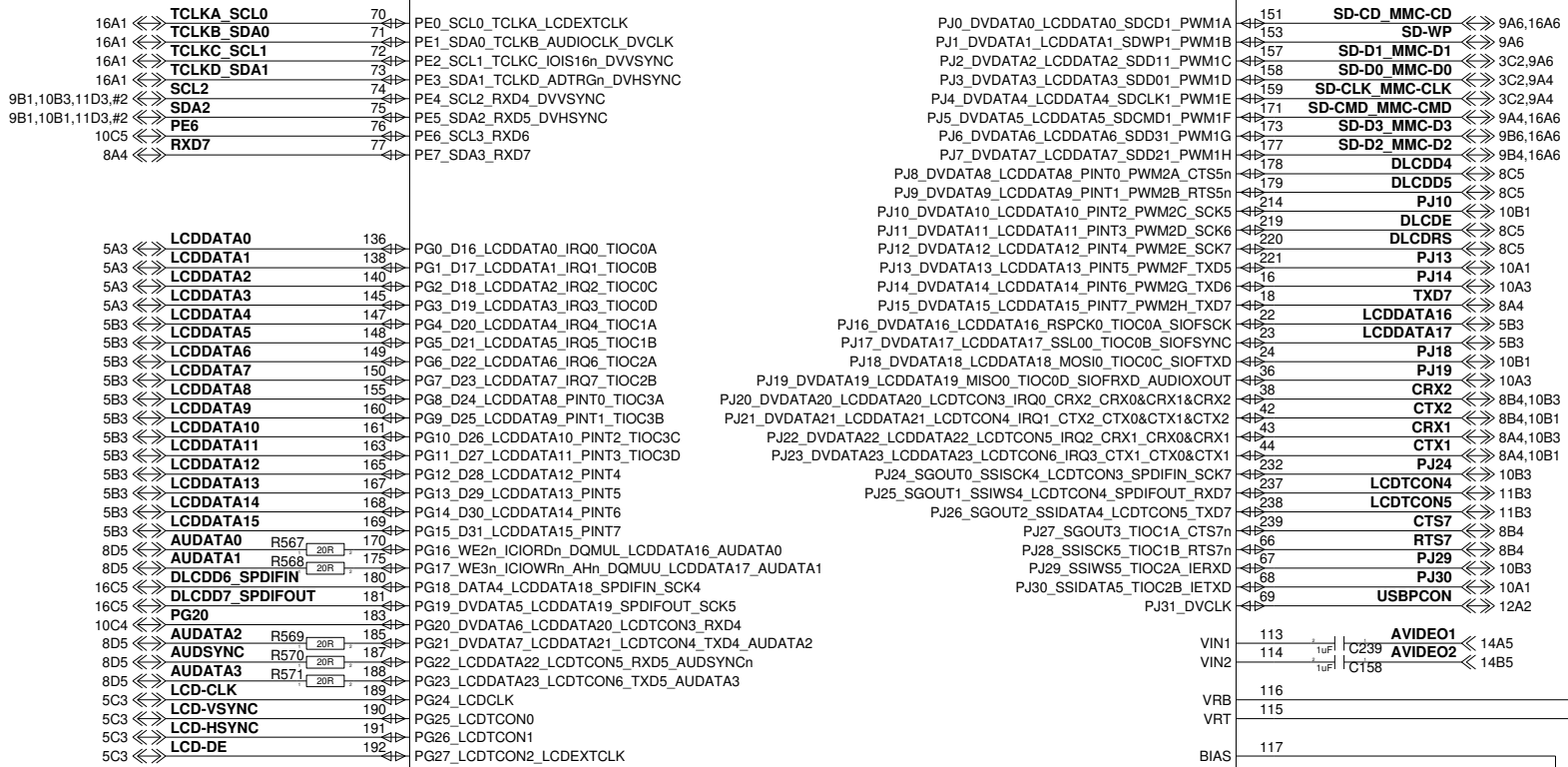
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**RSK2+SH7269**

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**MCU 2/3, MCU Decoupling**

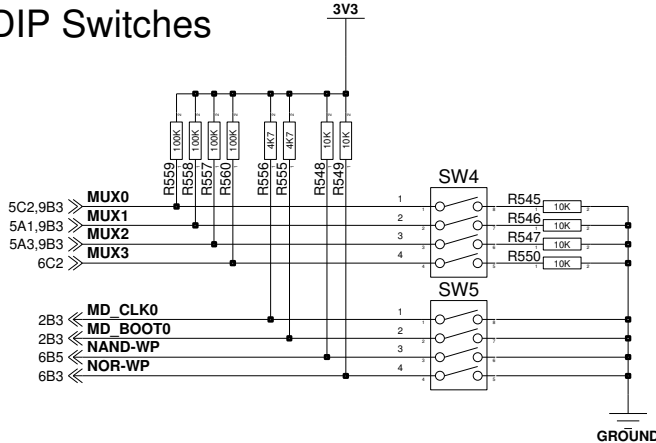
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# MCU 3/3

U1-3  
R5S72691W266FP



## DIP Switches



Switch Pin	Function
1 MUX0	ON: Disable OSPI Flash Enable [15:22] address bus
	OFF: Enable OSPI Flash Disable [15:22] address bus
2 MUX1	ON: Enable [0:15] data bus Disable NAND Flash
	OFF: Disable [0:15] data bus Enable NAND Flash
3 MUX2	ON: Disable HDMI output Enable LCD output
	OFF: Enable HDMI output Disable LCD output
4 MUX3	ON: Set SDRAM to 16MB mode Set OSPI to 6 wire mode
	OFF: Set SDRAM to 32MB mode Set OSPI to 4 wire mode

Switch Pin	Function
1	ON: Disables clock SSCG
	OFF: Enables clock SSCG
2	ON: MCU boots from NOR flash
	OFF: MCU boots from QSPI flash
3	ON: Enables NAND flash write protection
	OFF: Disables NAND flash write protection
4	ON: Enables NOR flash write protection
	OFF: Disables NOR flash write protection

SIZE A4

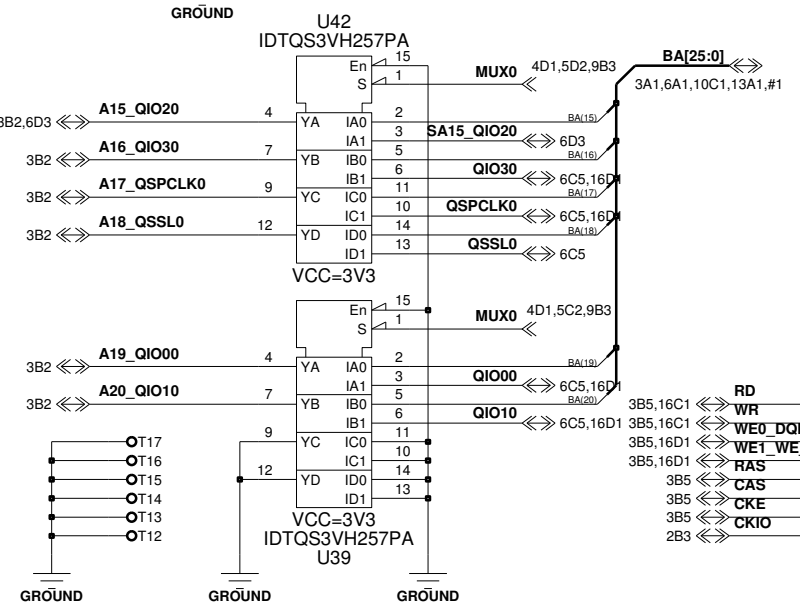
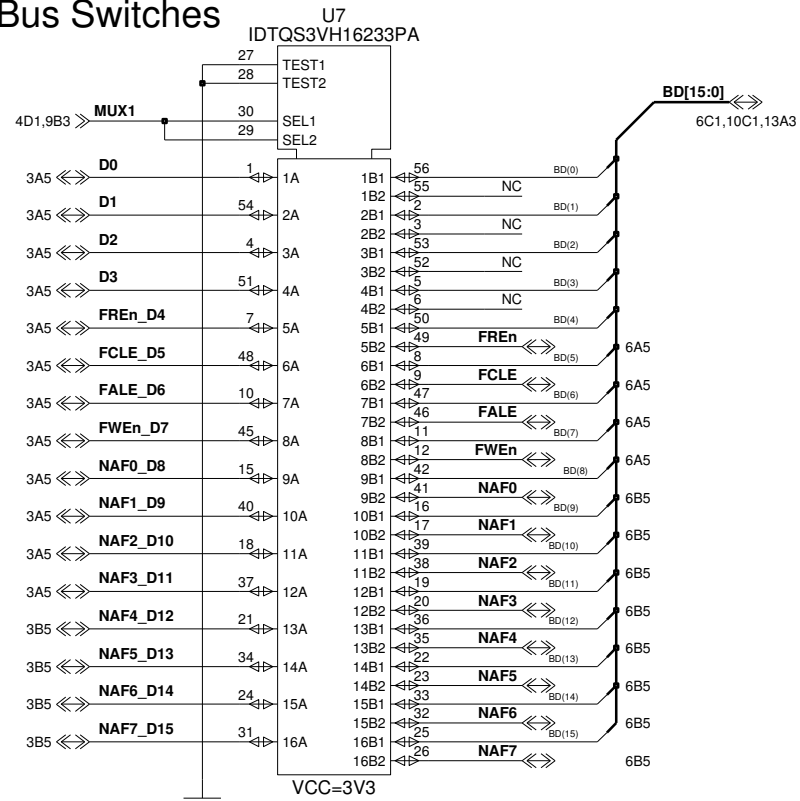
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Dukes Meadow, Bourne End, Buckinghamshire  
UNITED KINGDOM

SCHEMATIC TITLE  
**RSK2+SH7269**

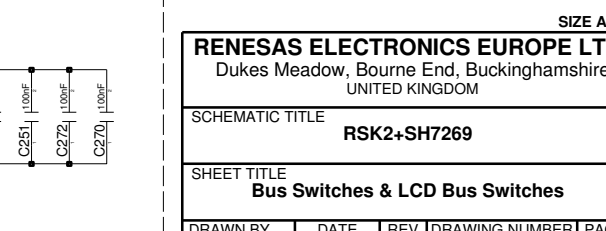
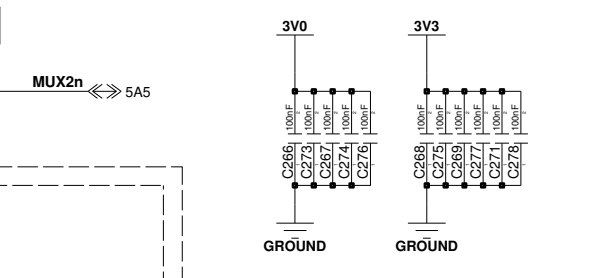
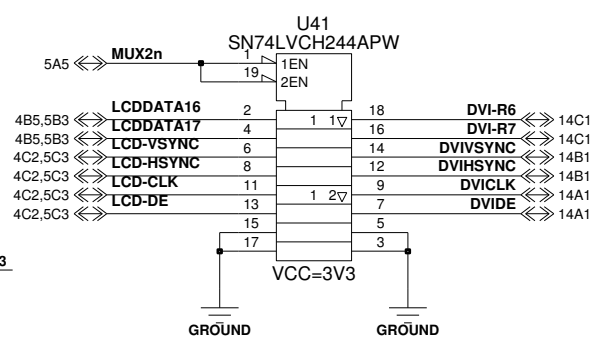
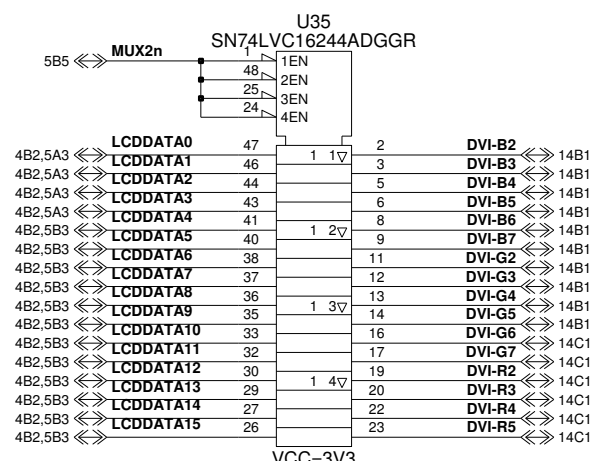
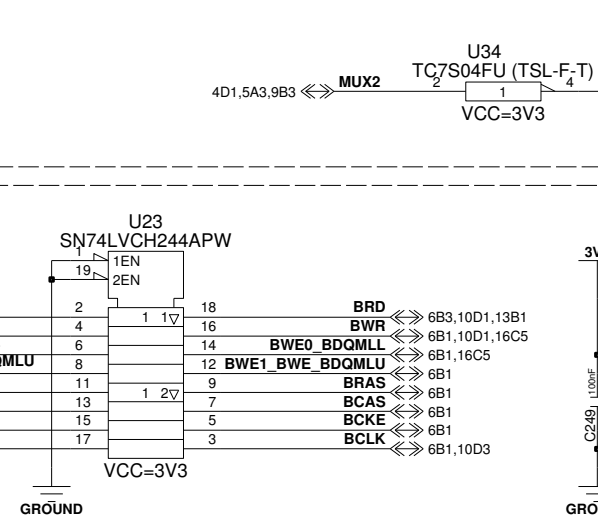
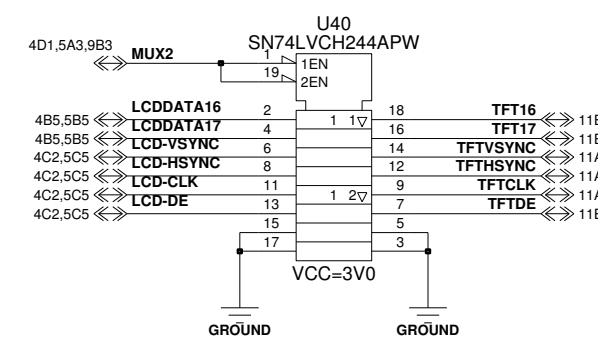
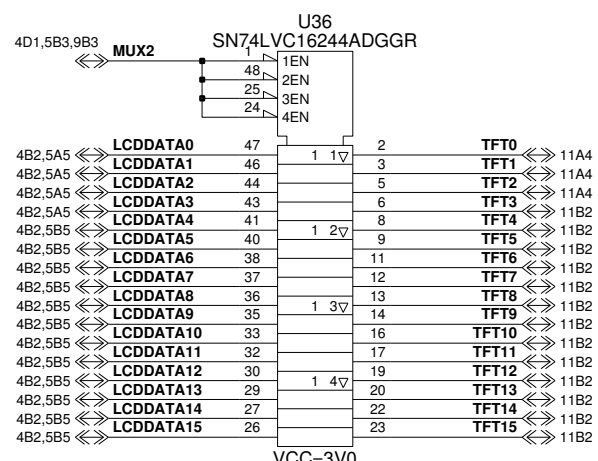
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**MCU 3/3, DIP Switches**

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# Bus Switches



# LCD Bus Switches & Level Translation



SIZE A4

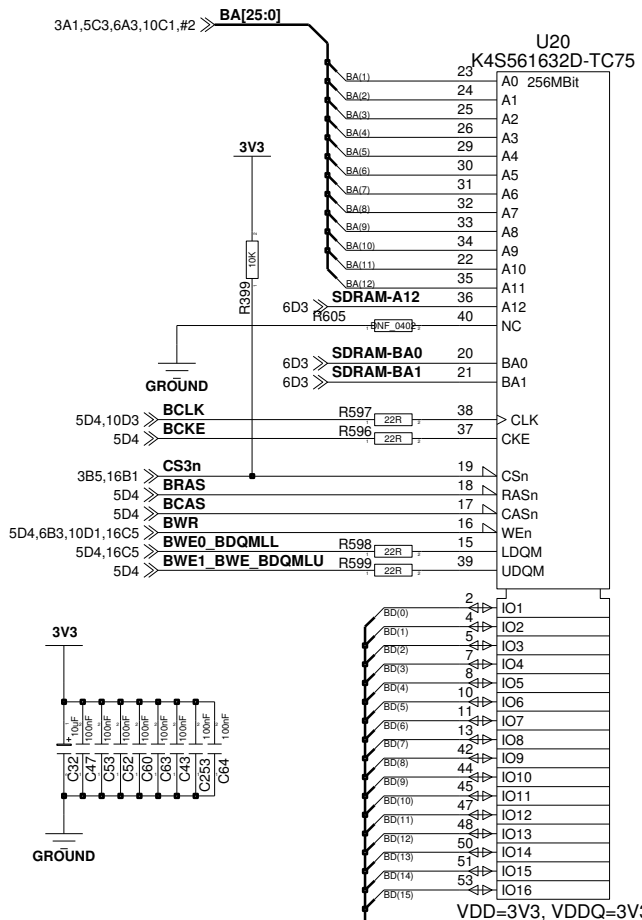
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 UNITED KINGDOM

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**RSK2+SH7269**

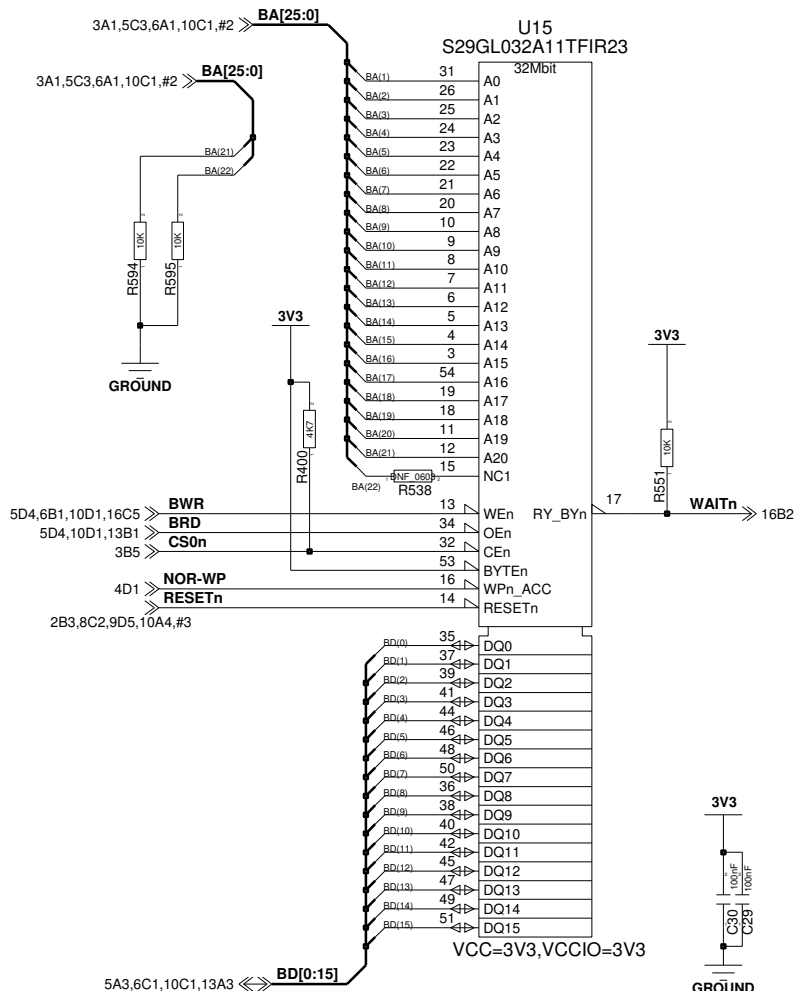
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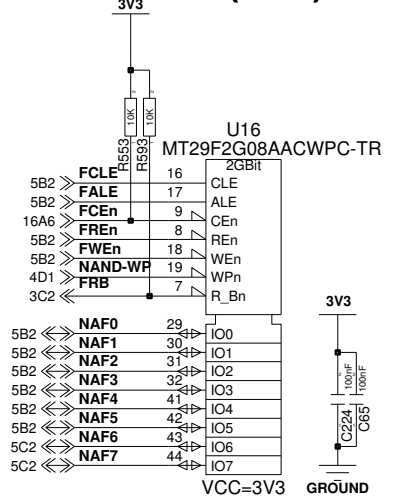
# SDRAM (256M X 16)



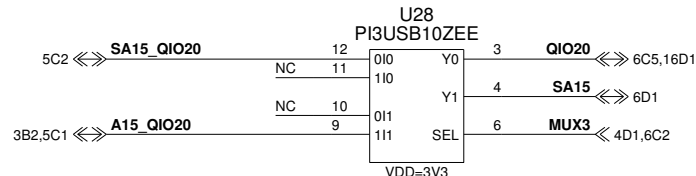
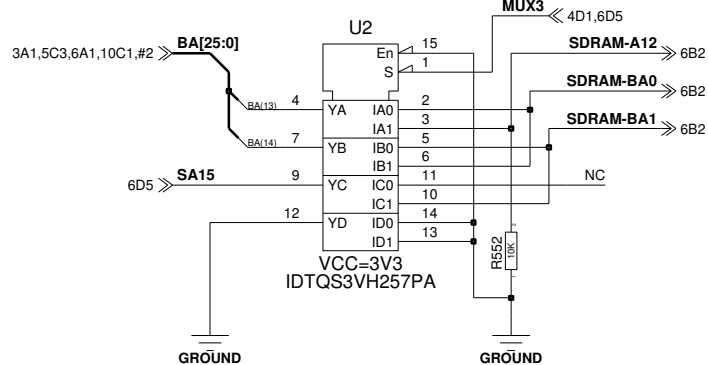
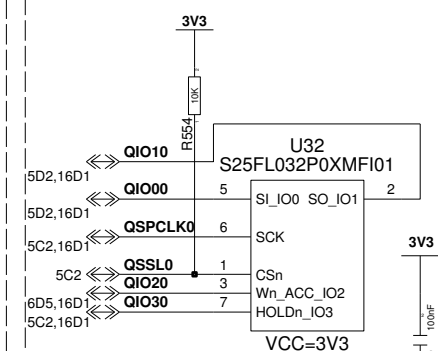
# Nor Flash (32M x 16)



# NAND Flash (2Gb)



# QSPI Flash (32Mb)



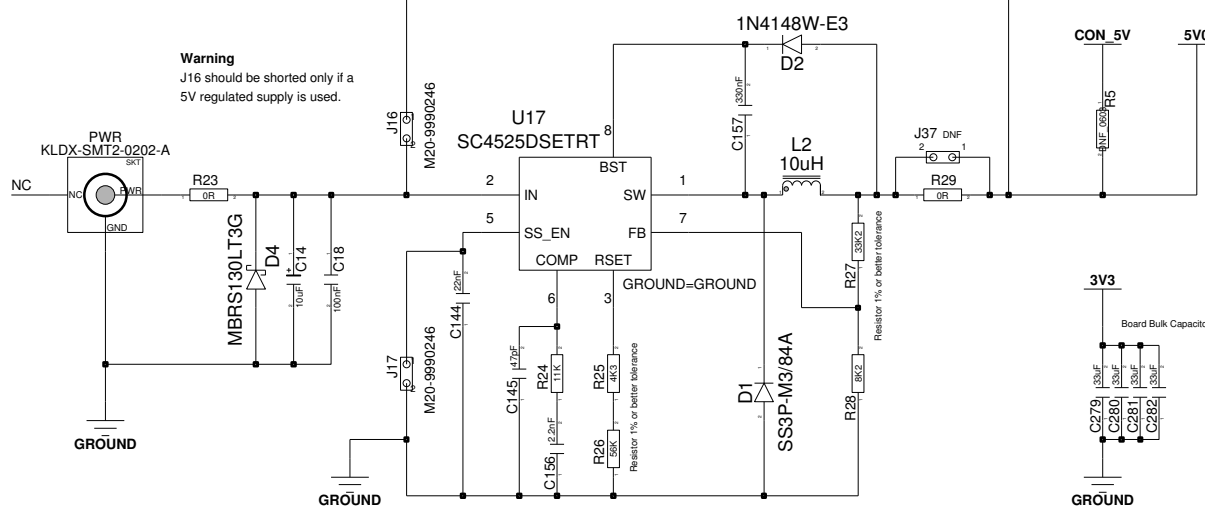
RENASAS ELECTRONICS EUROPE LTD  
Dukes Meadow, Bourne End, Buckinghamshire  
UNITED KINGDOM

SHEET TITLE  
**SDRAM, NOR Flash, QSPI & NAND Flash**

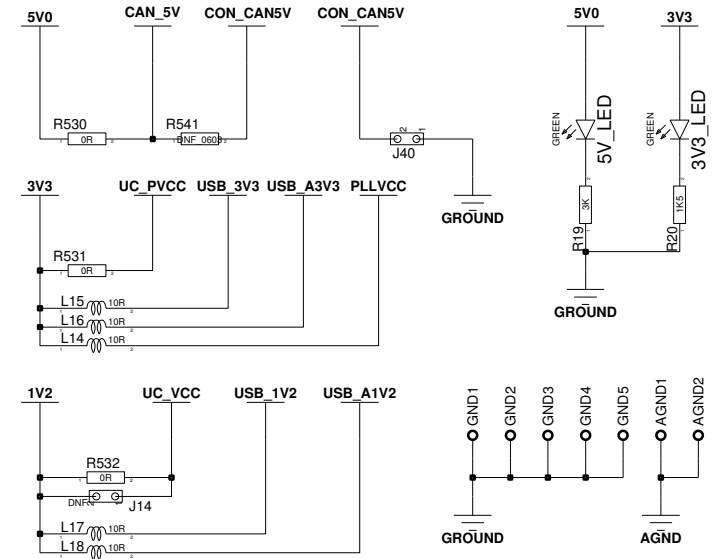
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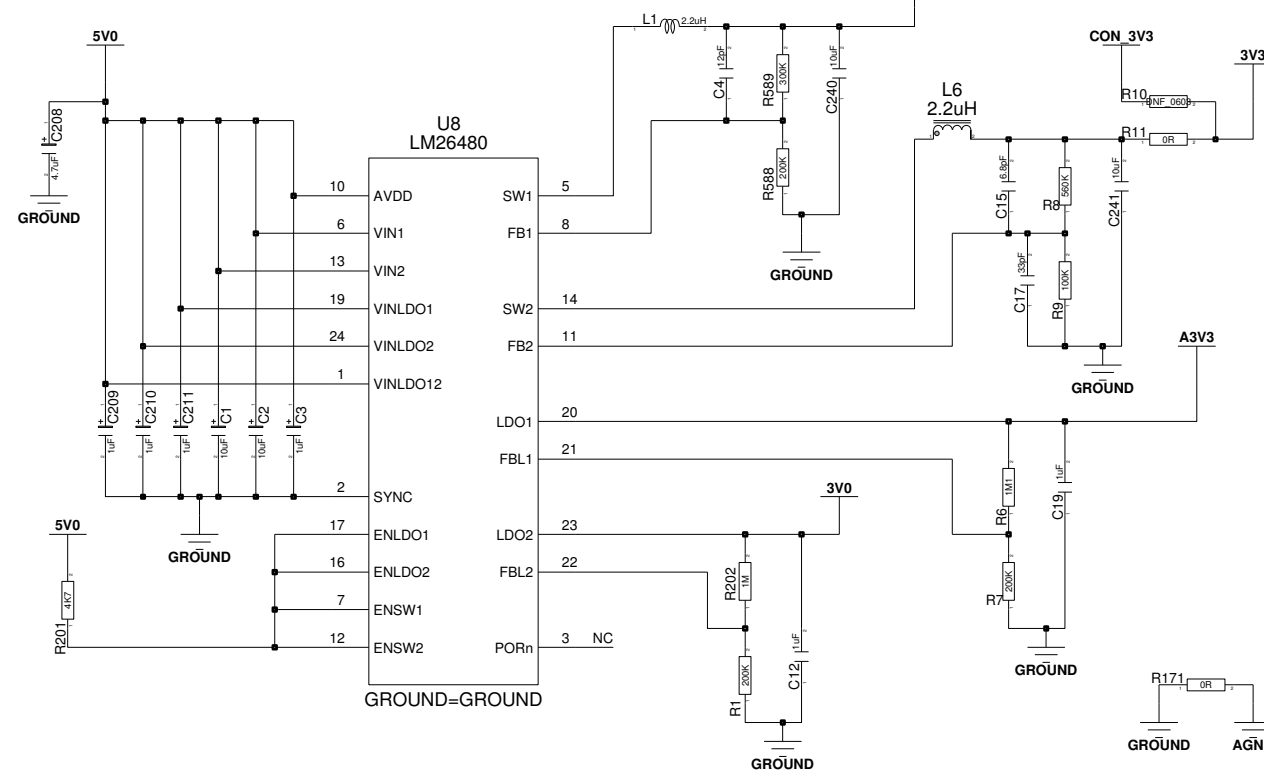
# 7-15V to 5V Regulator



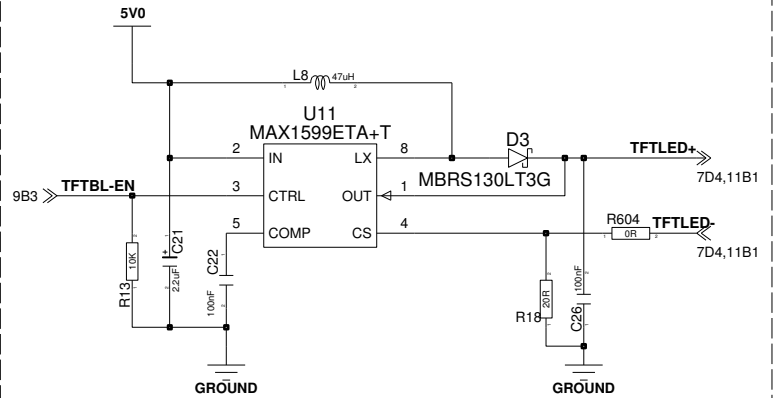
# Power LEDs, Test Points & Power Supply Options



# 5V to 1V2, 3V0 & 3V3 Regulator

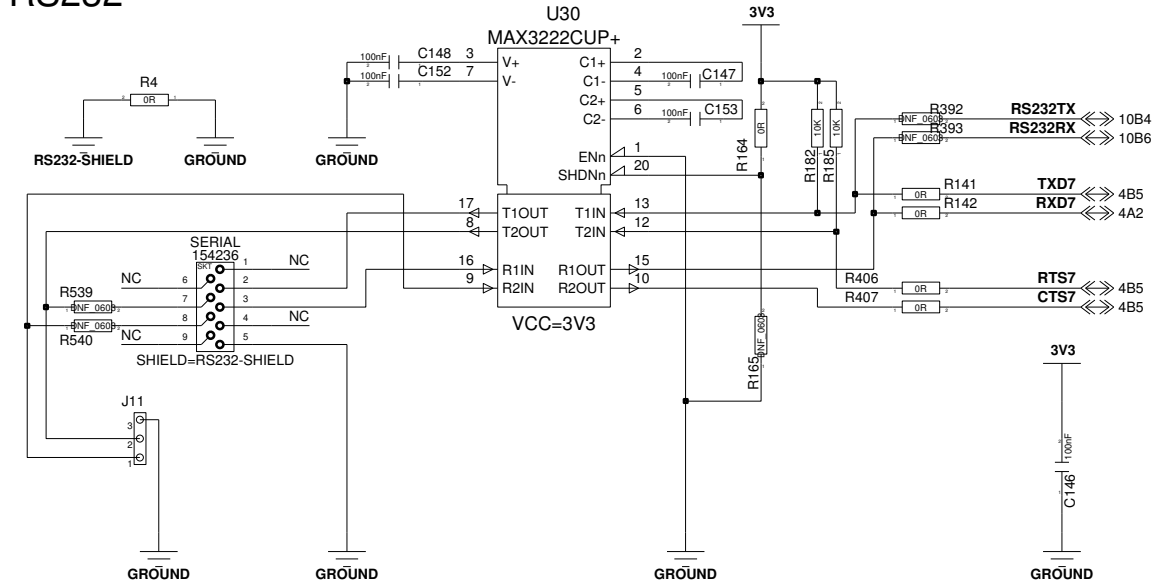


# TFT Backlight Regulator

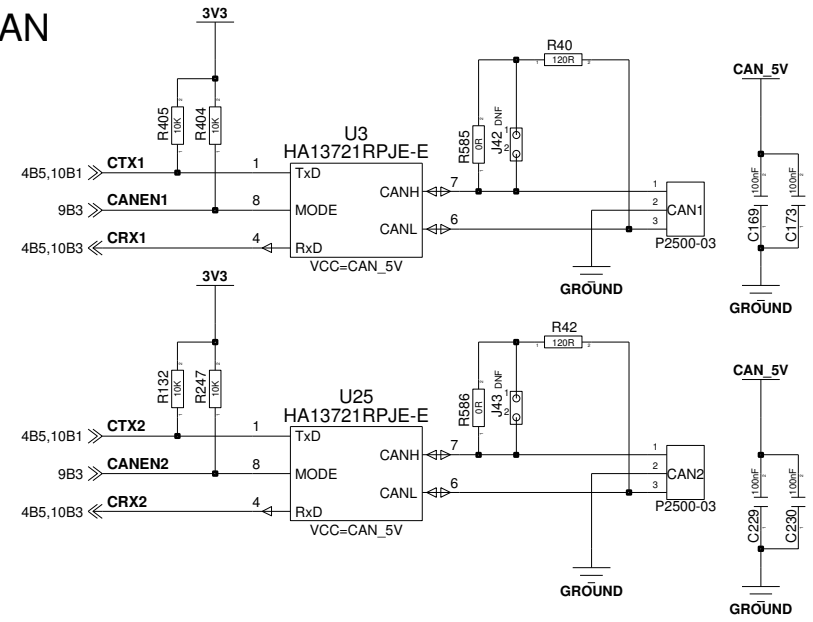


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SCHEMATIC TITLE <b>RSK2+SH7269</b>				
SHEET TITLE <b>Main Power Supply</b>				
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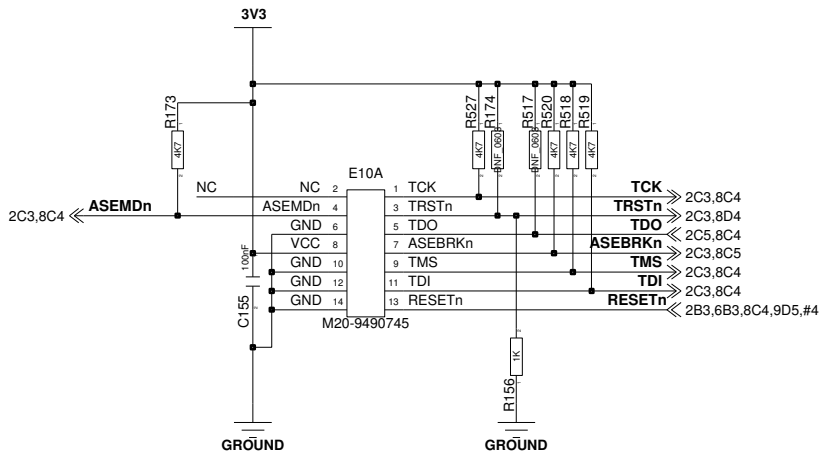
# RS232



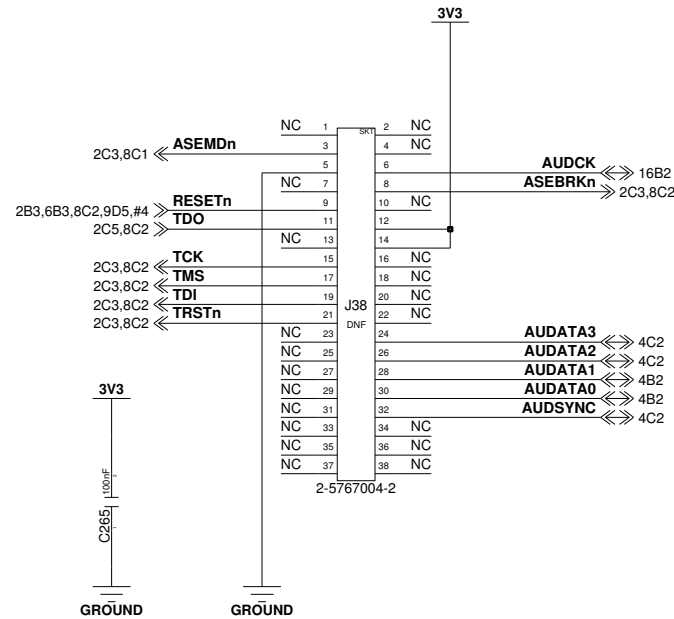
# CAN



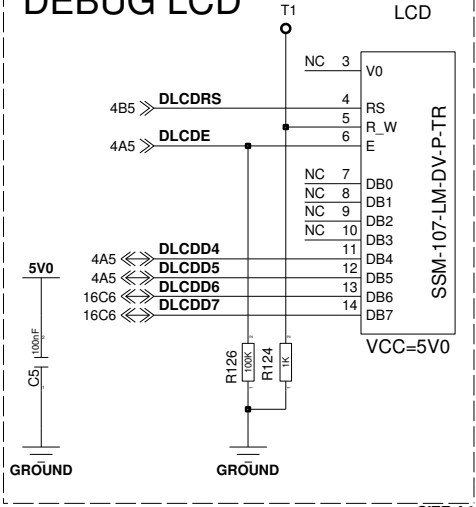
# E10A



# AUD E10A



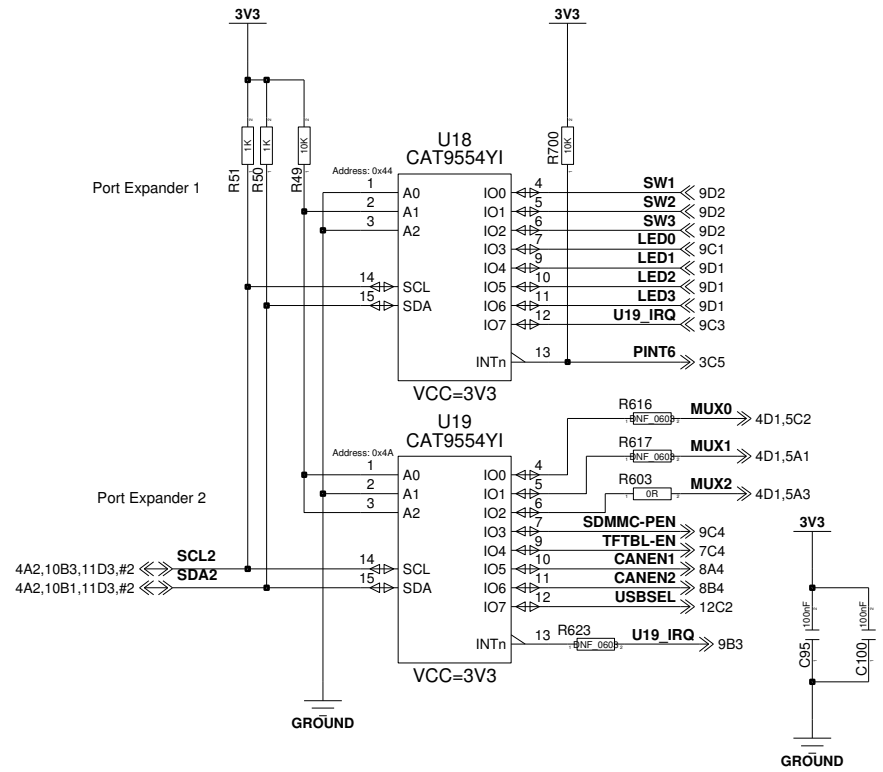
# DEBUG LCD



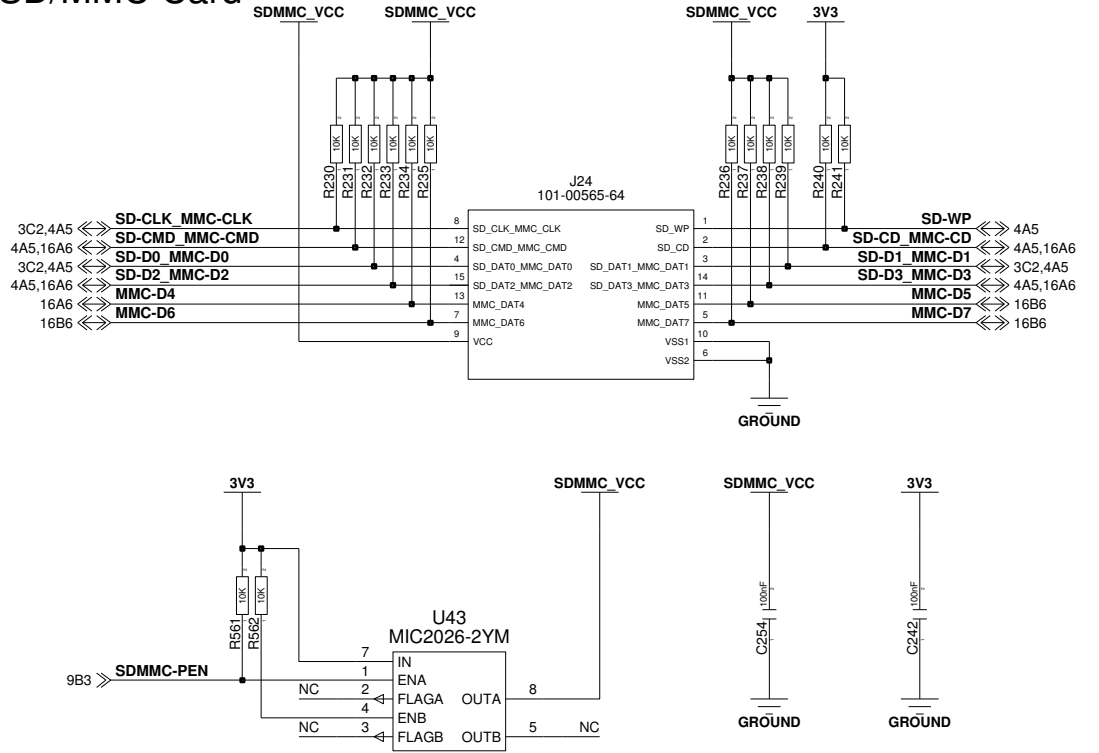
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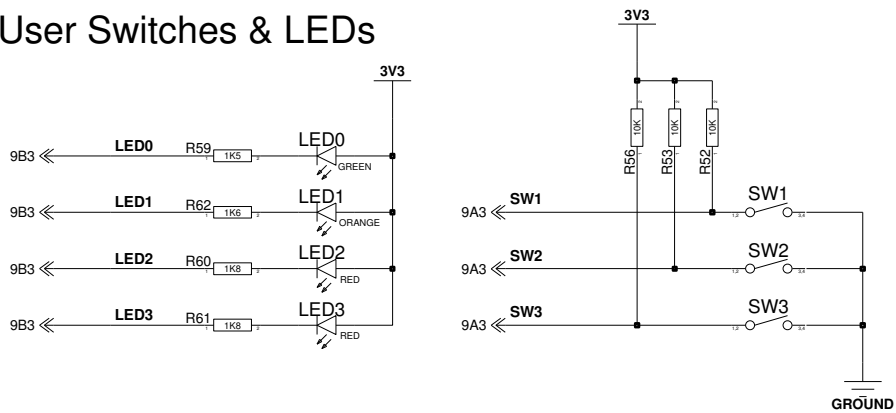
# IIC Port Expander



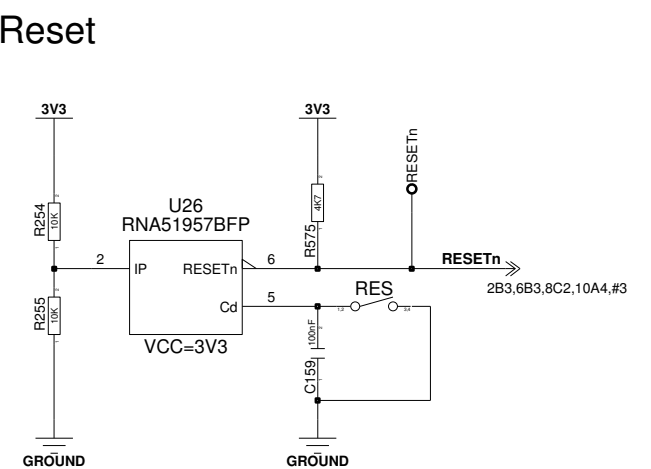
# SD/MMC Card



# User Switches & LEDs



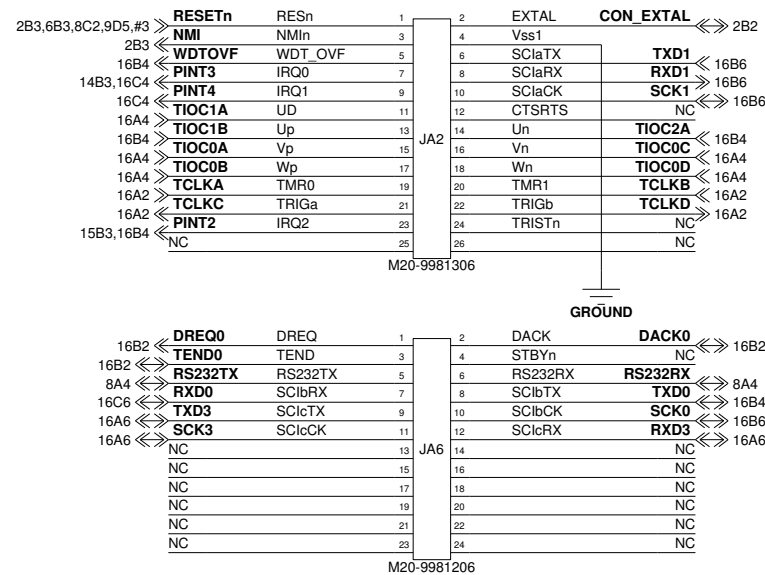
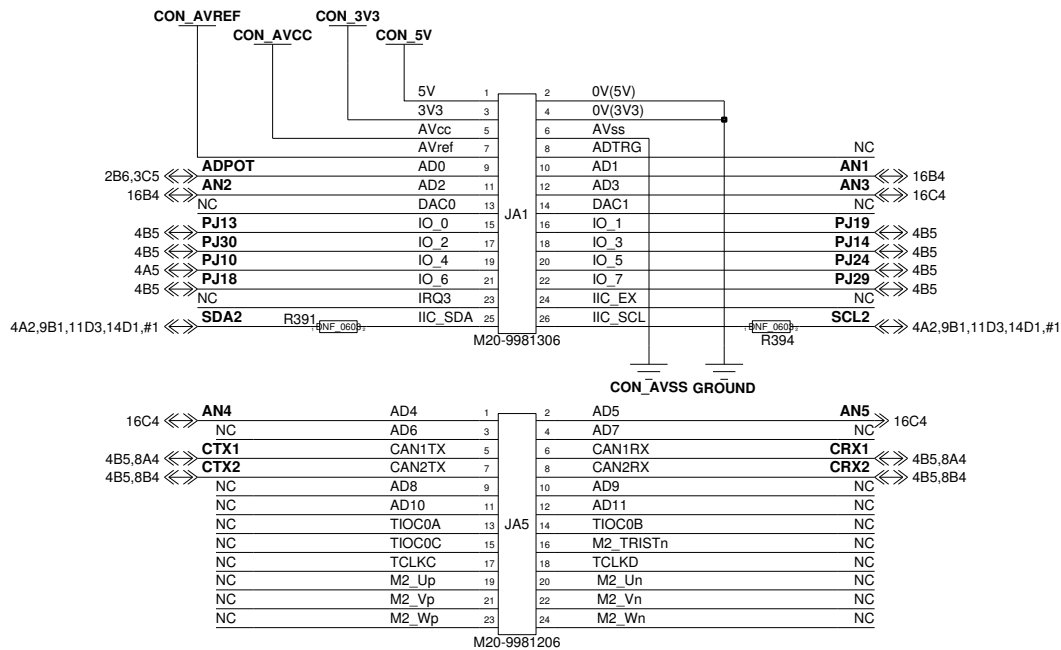
# Reset



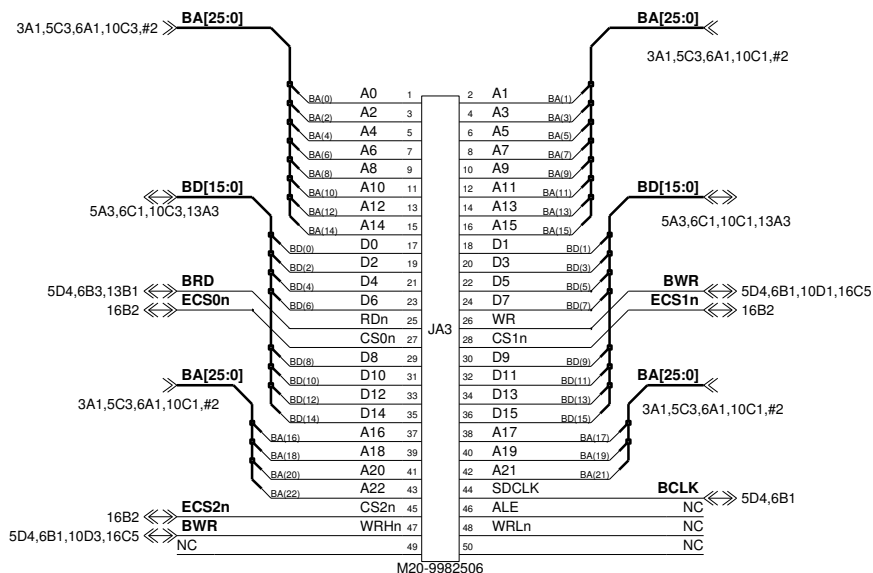
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SHEET TITLE <b>IIC IO Port, Switches, LEDs, Reset, MMC</b>				
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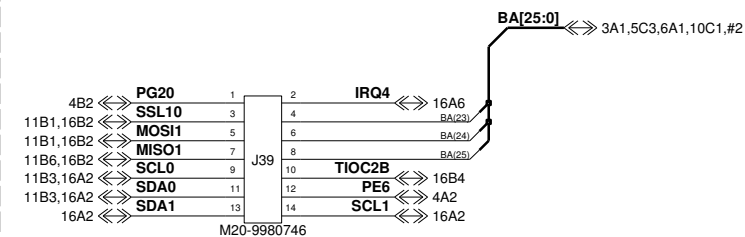
# Application Headers



# Bus Header

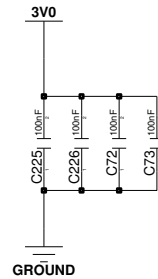
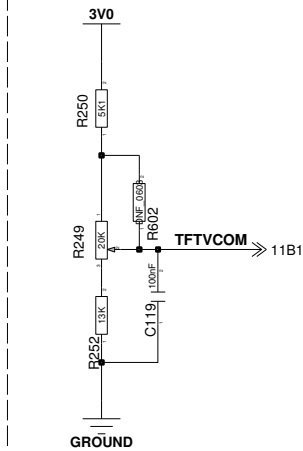
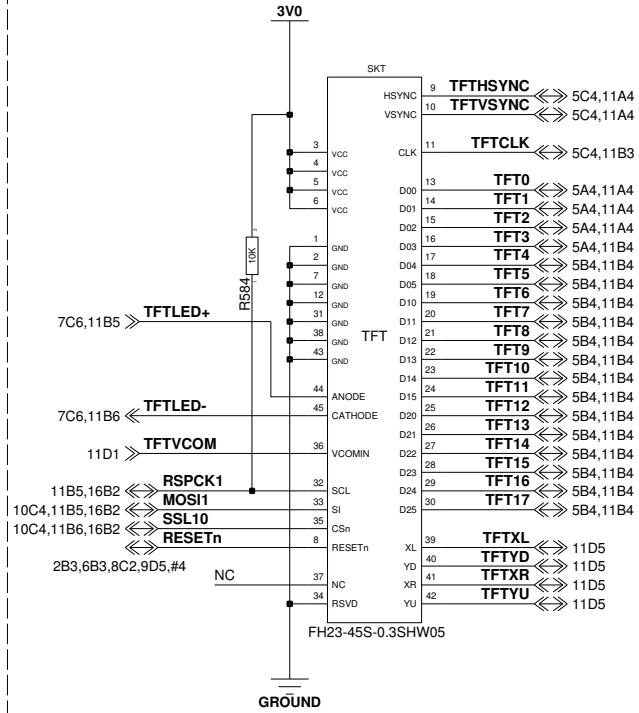


# Misc. Headers

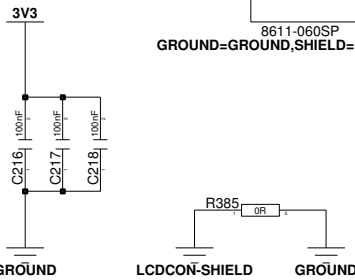
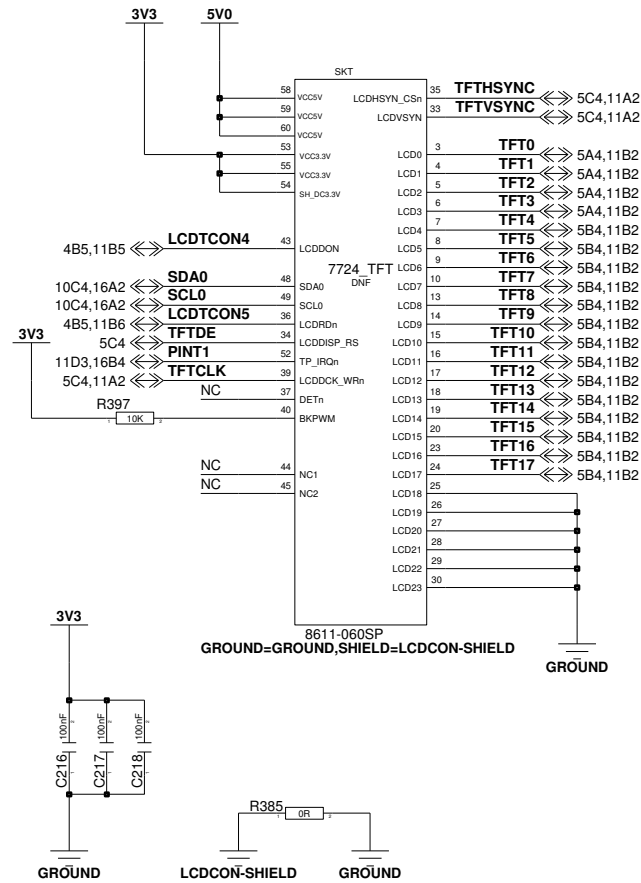


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SHEET TITLE <b>Application Headers</b>				
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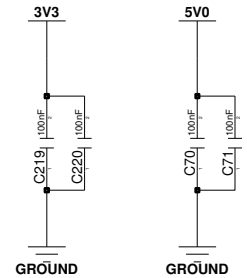
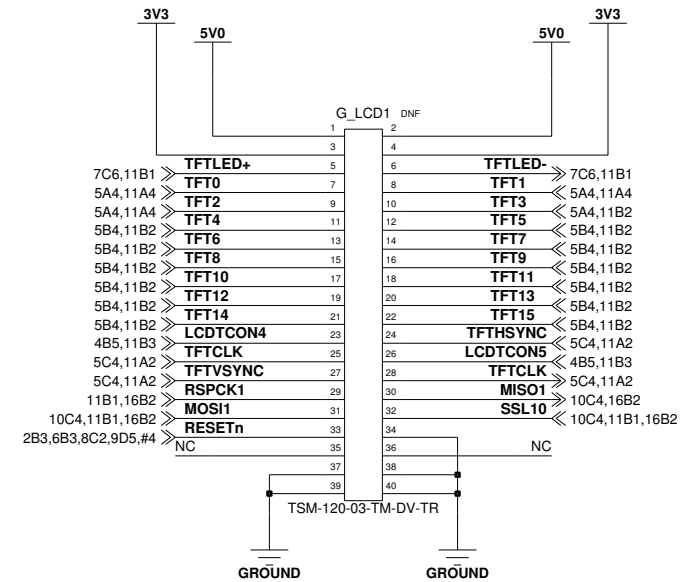
# Onboard TFT Connector



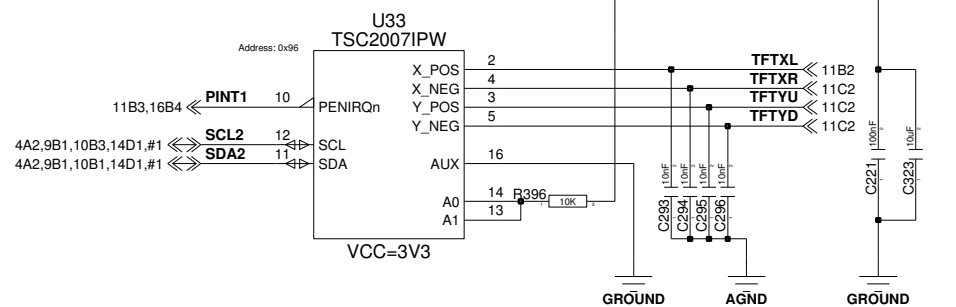
# External TFT Board Connector



# Generic LCD Connector



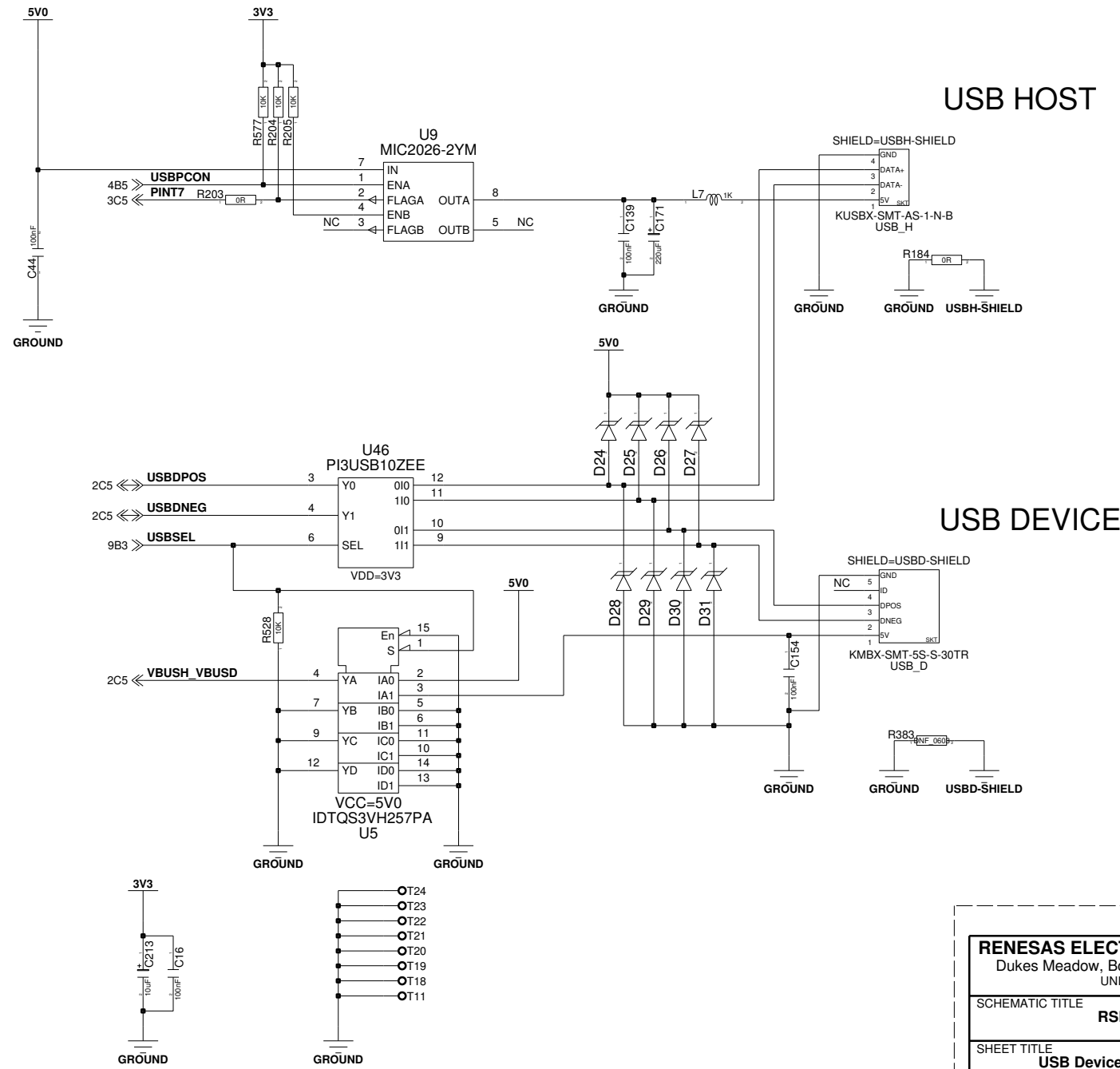
# Touchscreen Controller



SIZE A4

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SCHEMATIC TITLE				
<b>RSK2+SH7269</b>				
SHEET TITLE				
<b>TFT Connectors, Touchscreen Controller</b>				
DRAWN BY	DATE	REV	DRAWING NUMBER	PAGE
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# USB Host & Device

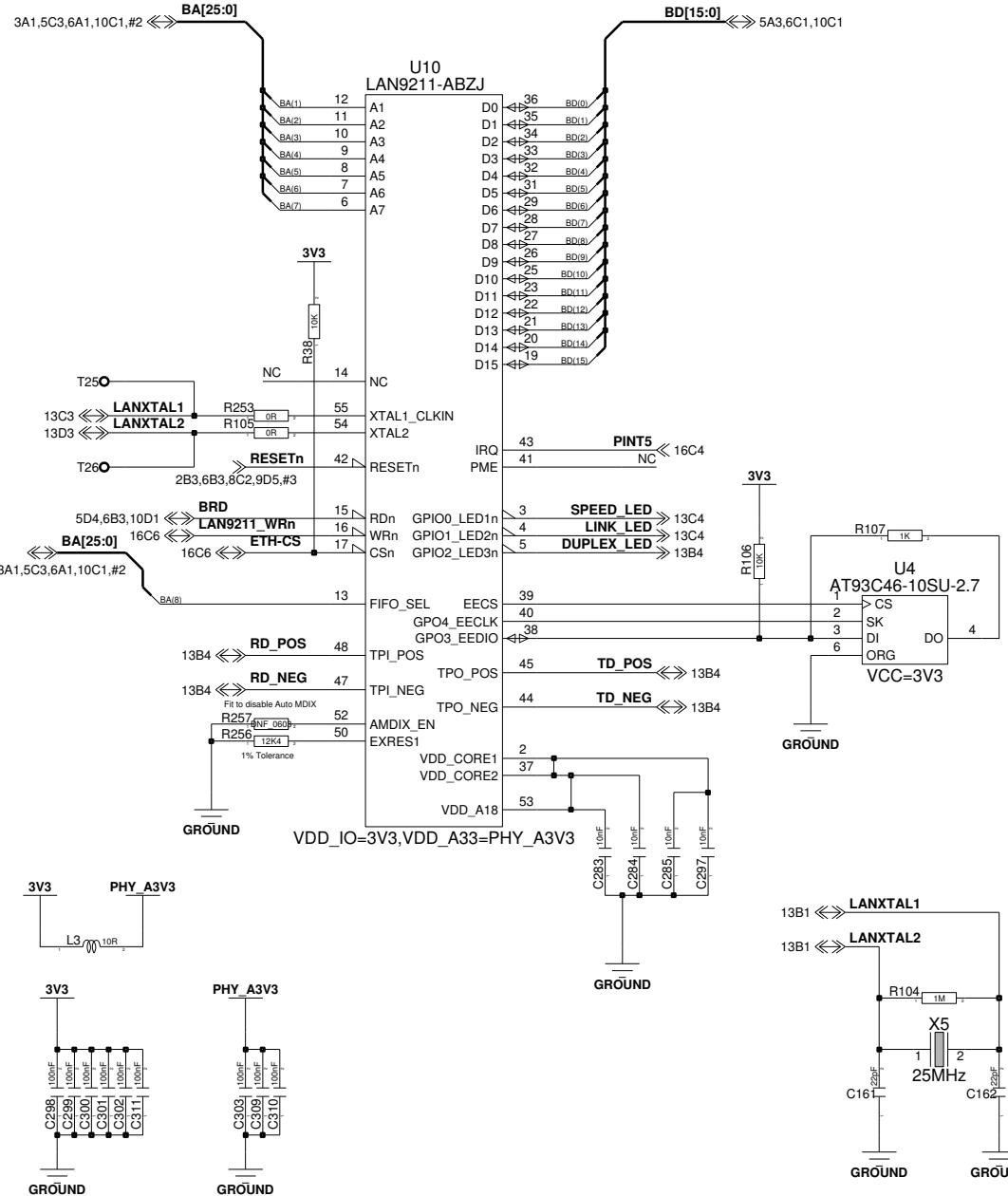


USB HOST

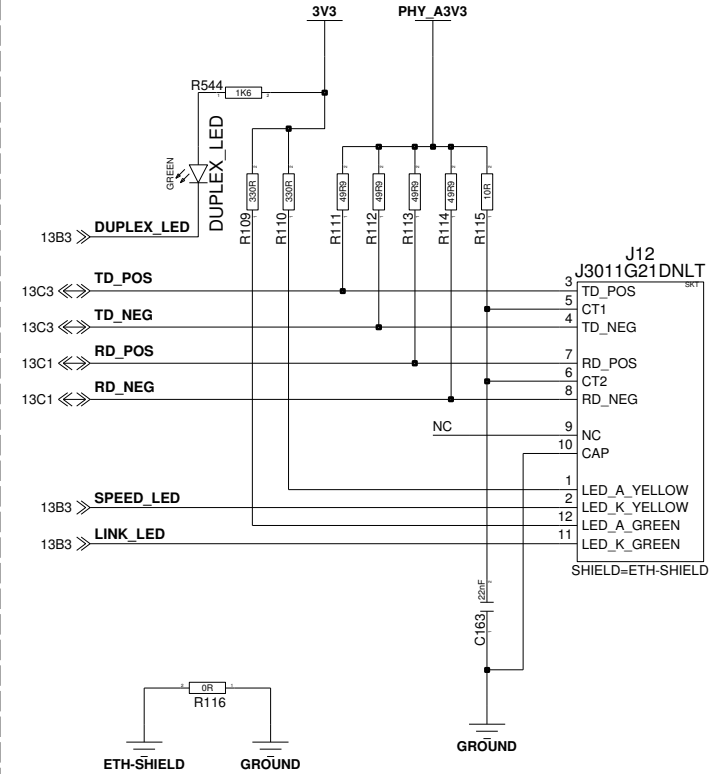
USB DEVICE

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SHEET TITLE <b>USB Device &amp; Host, USB Power</b>				
DRAWN BY OKE	DATE 15-05-12	REV 3	DRAWING NUMBER D010332_04	PAGE 12/16

# LAN Controller

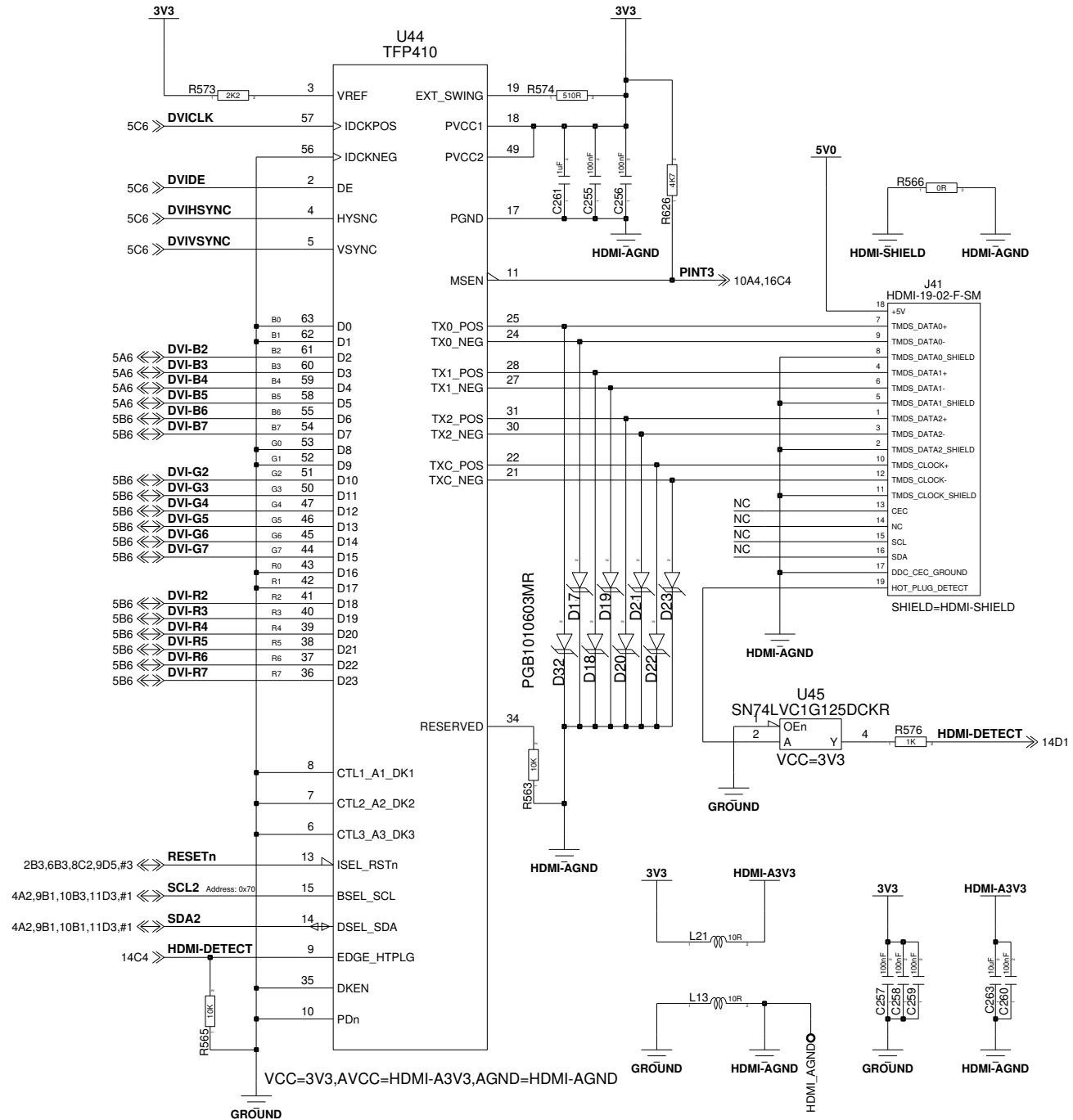


# Ethernet Connector

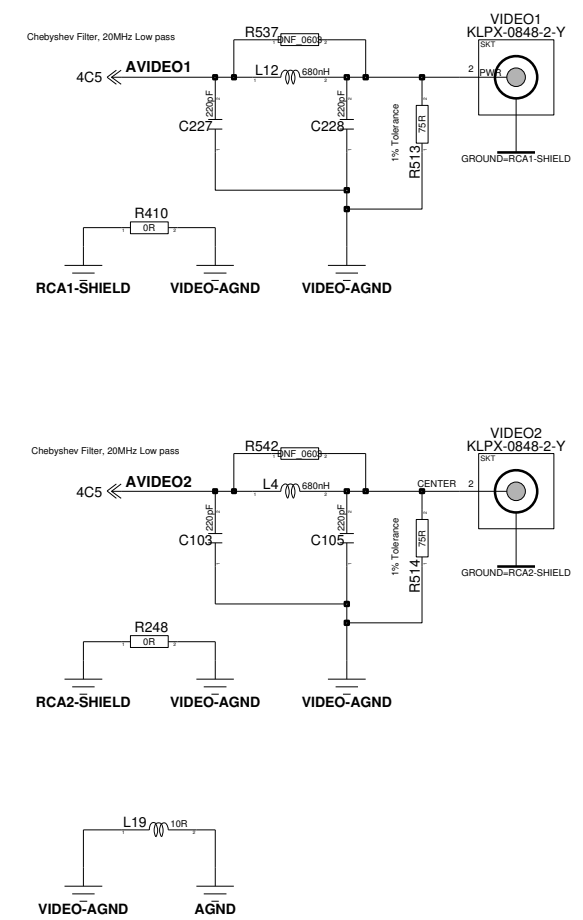


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SCHEMATIC TITLE				
<b>RSK2+SH7269</b>				
SHEET TITLE				
<b>Ethernet Interface</b>				
DRAWN BY	DATE	REV	DRAWING NUMBER	PAGE
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# DVI Over HDMI Interface



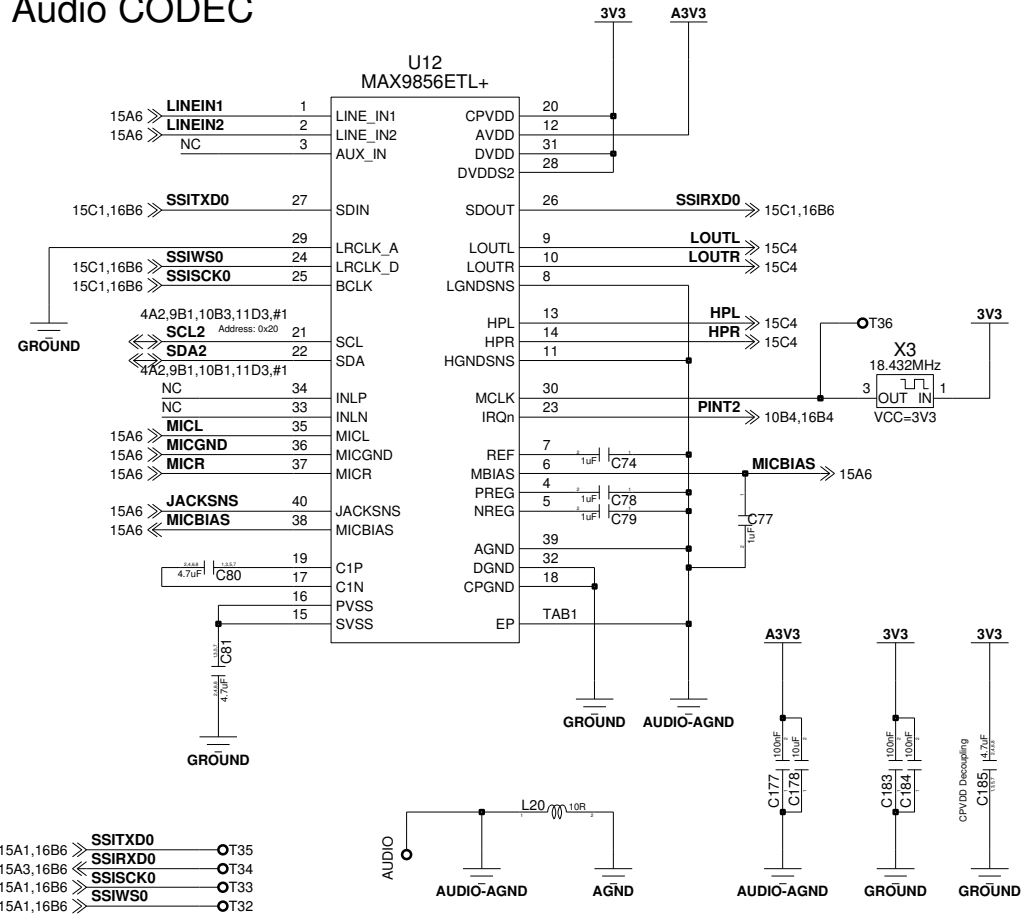
# Composite Input



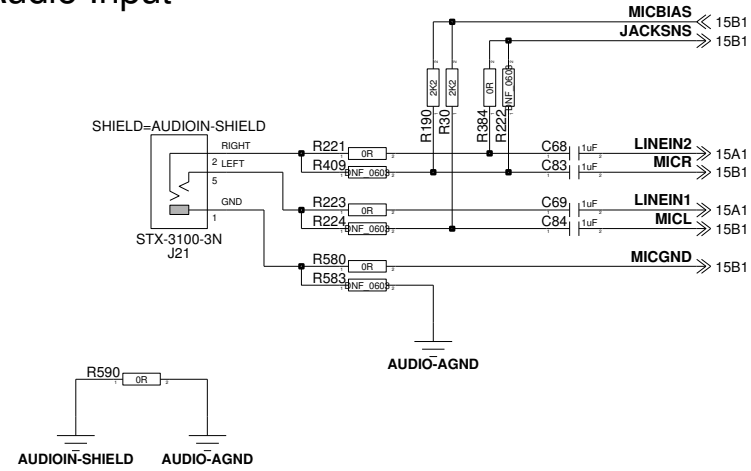
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Dukes Meadow, Bourne End, Buckinghamshire UNITED KINGDOM				
SCHEMATIC TITLE				
<b>RSK2+SH7269</b>				
SHEET TITLE				
<b>DVI Over HDMI Interface &amp; Composite Input</b>				
DRAWN BY	DATE	REV	DRAWING NUMBER	PAGE
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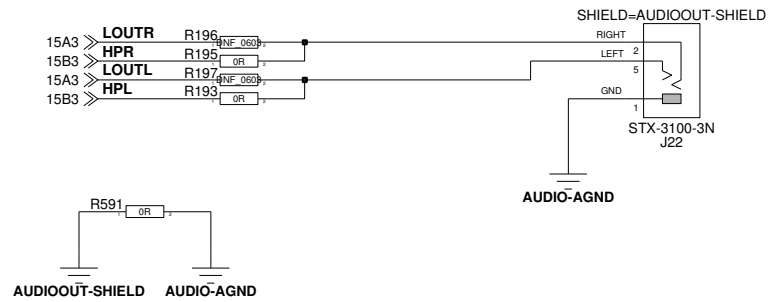
# Audio CODEC



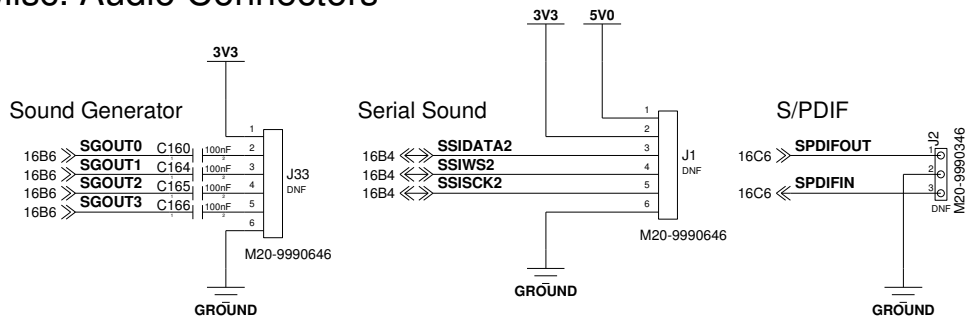
# Audio Input



# Audio Output

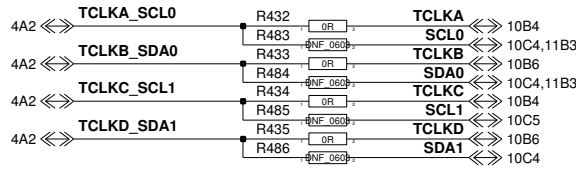


# Misc. Audio Connectors

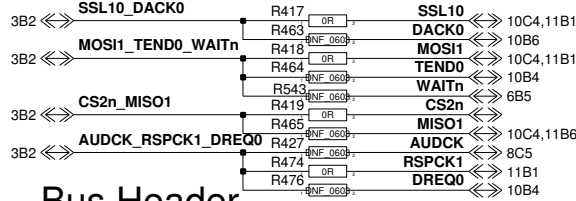


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SCHEMATIC TITLE <b>RSK2+SH7269</b>				
SHEET TITLE <b>Audio CODEC, Audio Input &amp; Output</b>				
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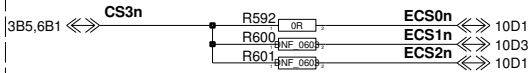
### Option Links IIC



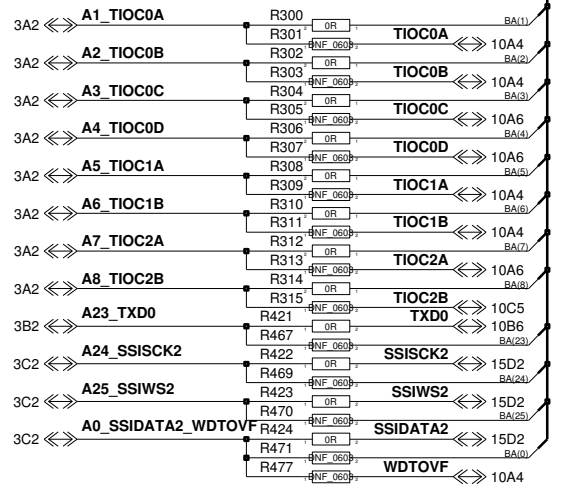
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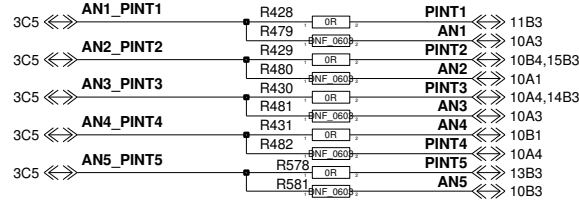
### Bus Header



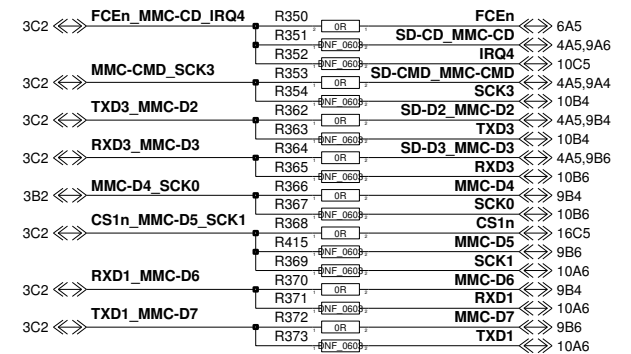
### Address Bus



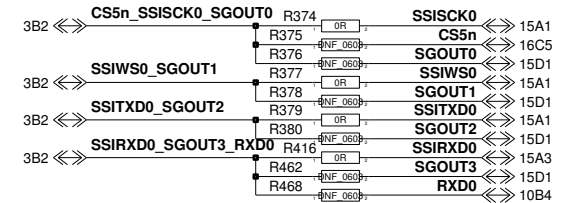
### ADC



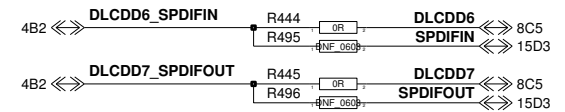
### MMC



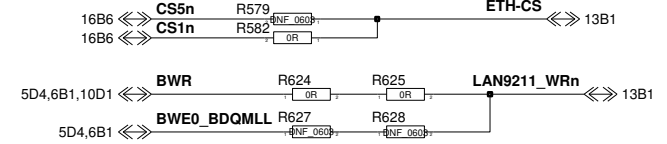
### CODEC IF



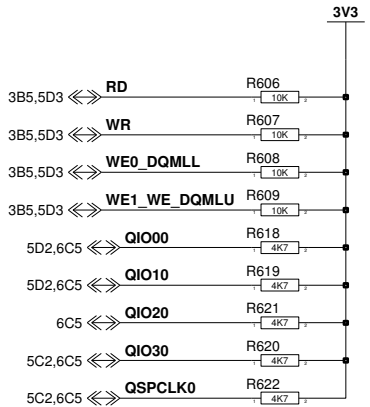
### SPDIF



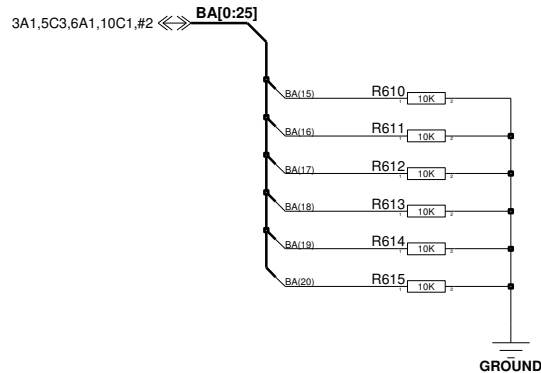
### Ethernet



### Misc. Pull Up Resistors



### Misc. Pull Down Resistors



SIZE A4

**RENESAS ELECTRONICS EUROPE LTD**  
 Dukes Meadow, Bourne End, Buckinghamshire  
 UNITED KINGDOM

SCHEMATIC TITLE  
**RSK2+SH7269**

SHEET TITLE  
**Option Links**

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			PAGE <b>19/16</b>