

Compal Confidential
FH51M SUB Schematic Document
LS-J891P

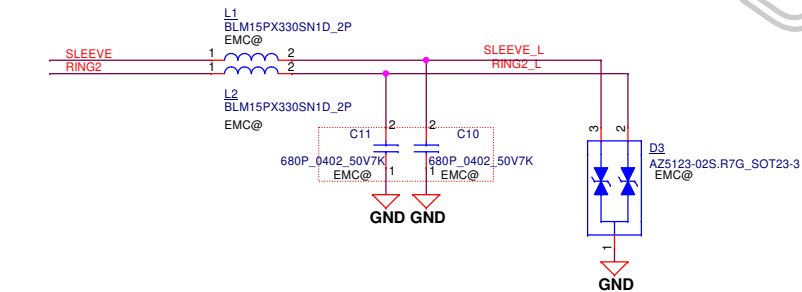
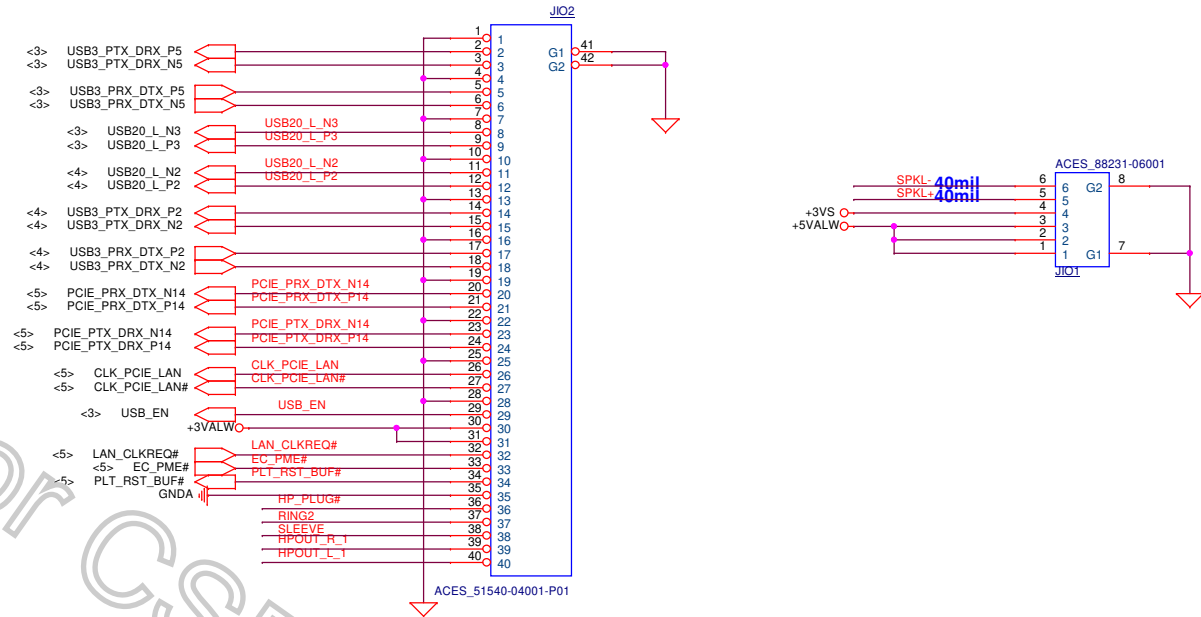
Rev: 1.0

2020-01-20

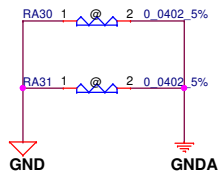
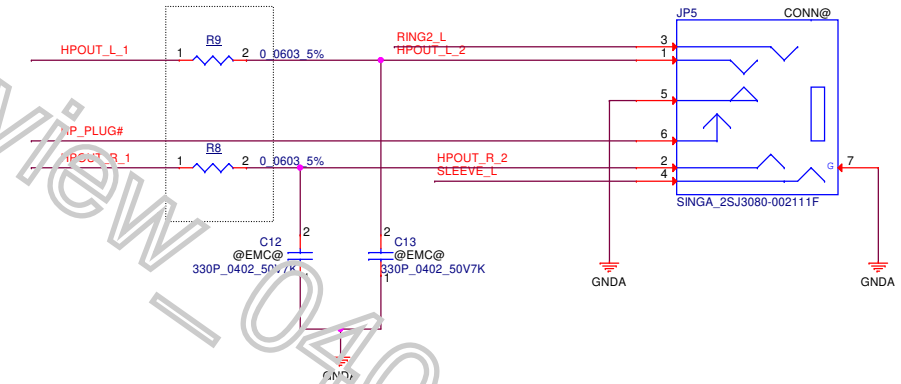
Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	<Issued_Date>	Deciphered Date	2017/12/31	Title	Cover Sheet
THIS SHEET OF ENGINEERING DRAWING IS THE PROPRIETARY PROPERTY OF COMPAL ELECTRONICS, INC. AND CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION. THIS SHEET MAY NOT BE TRANSFERRED FROM THE CUSTODY OF THE COMPETENT DIVISION OF R&D DEPARTMENT EXCEPT AS AUTHORIZED BY COMPAL ELECTRONICS, INC. NEITHER THIS SHEET NOR THE INFORMATION IT CONTAINS MAY BE USED BY OR DISCLOSED TO ANY THIRD PARTY WITHOUT PRIOR WRITTEN CONSENT OF COMPAL ELECTRONICS, INC.				Size Custom	Document Number LS-J891P IO Board
				Date: Monday, April 06, 2020	Rev 0.1
				Sheet 1 of 6	

COMPAL CONFIDENTIAL

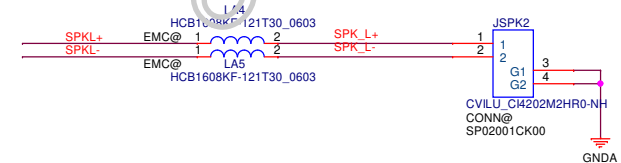
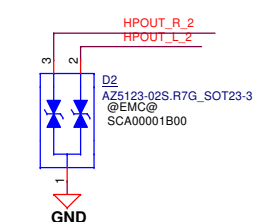
MODEL NAME: FH51M
PCB NAME: LS-J871P IO/B
COMPAL P/N:
REVISION: 0.2
DATE: 2019/12/09



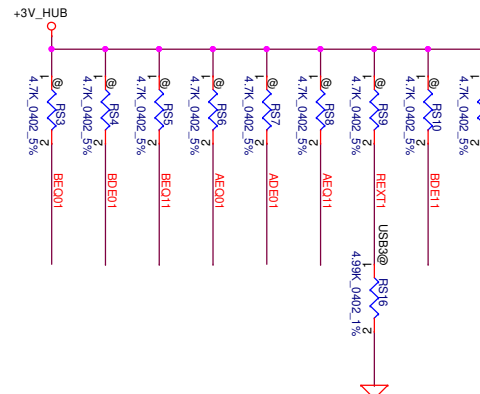
Audio vender request (change from 62 ohm to 0ohm)



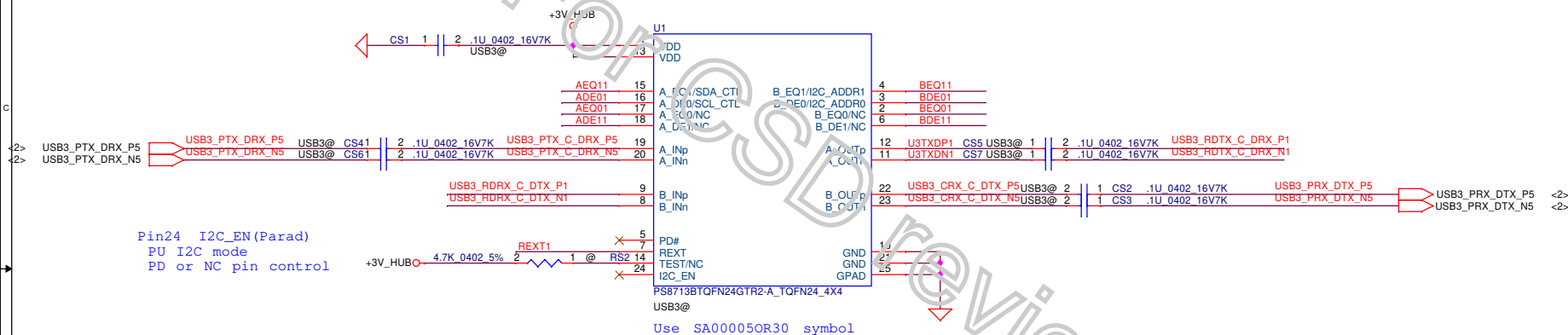
Confirm with ESD



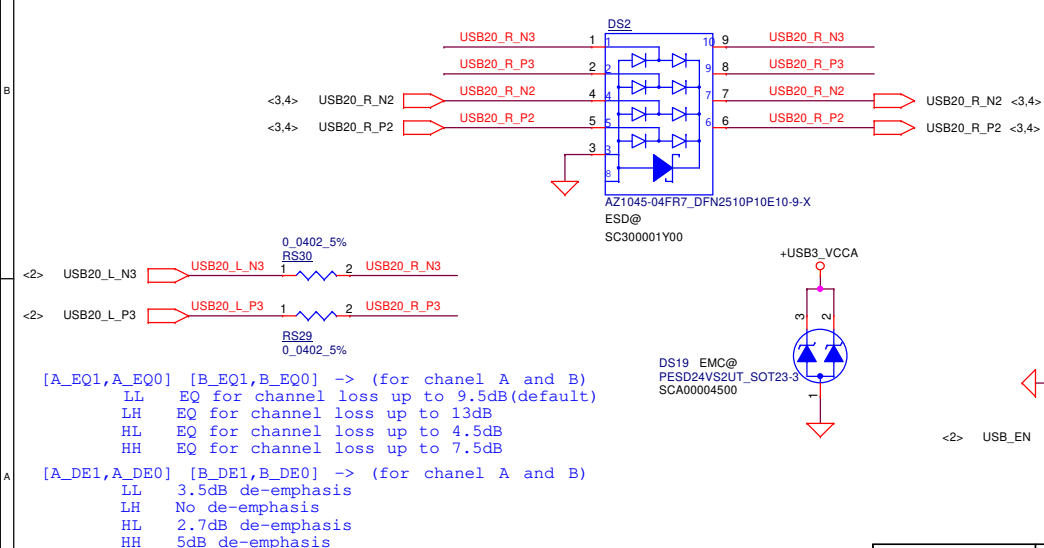
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						Size		Document Number		Rev	
						Custom		FH51M LS-J891P IO Board		0.1	
						Date:		Monday, April 06, 2020		Sheet 2 of 6	



EQ and DE chanel are Internally Pull down at ~150K(Parad)



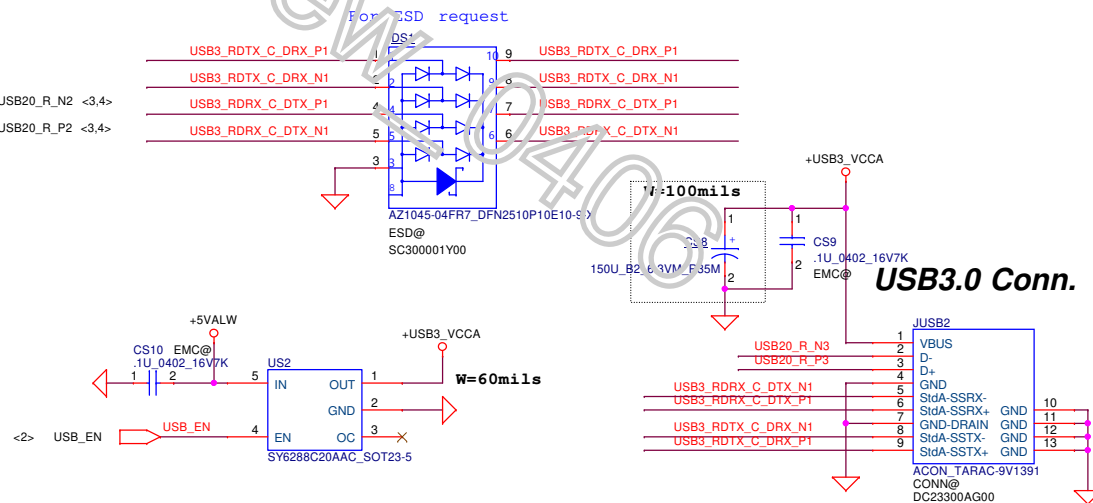
```
Pin24  I2C_EN(Parad)
      PU I2C mode
      PD or NC pin control
```



```
[A_EQ1,A_EQ0] [B_EQ1,B_EQ0] -> (for chanel A and B)
    LL  EQ for channel loss up to 9.5dB(default)
    LH  EQ for channel loss up to 13dB
    HL  EQ for channel loss up to 4.5dB
    HH  EQ for channel loss up to 7.5dB
```

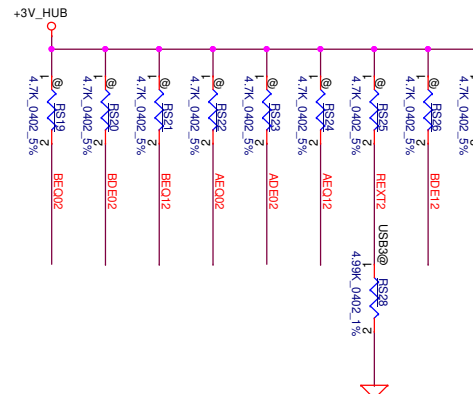
```
[A_DE1,A_DE0] [B_DE1,B_DE0] -> (for chanel A and B)
LL    3.5dB de-emphasis
LH    No de-emphasis
HL    2.7dB de-emphasis
HH    5dB de-emphasis
```

RS11 to Tuning Vswing
Default = 4.99K
RS11 can use 2.5K to 10K

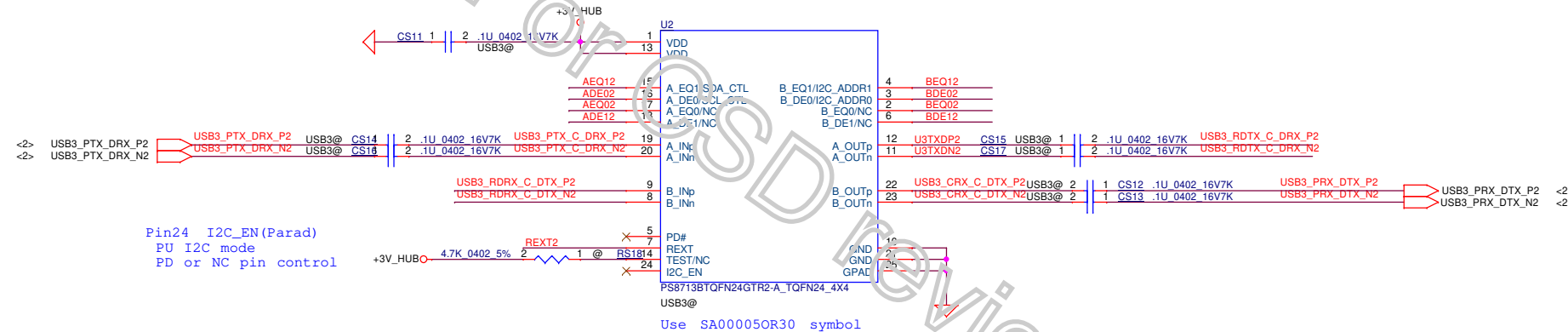


USB3.0 Conn.

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Issued Date	2014/08/21	Deciphered Date	2016/11/24	Title	
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				Size	Rev
				Document Number Custom	FHS1M LS-J891P IO Board 0.1
Date: Monday, April 06, 2020		Sheet 3 of 6			

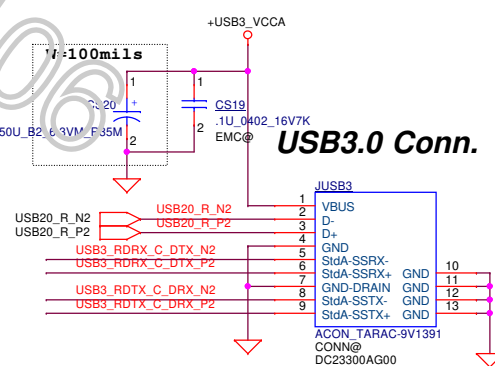
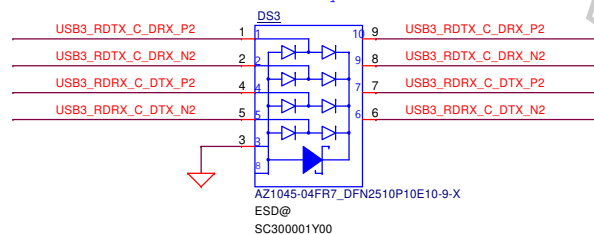


EQ and DE channel are Internally Pull down at ~150K(Parad)



Pin24 I2C_EN(Parad)
PU I2C mode
PD or NC pin control

For ESD request

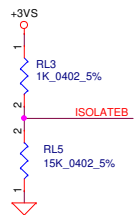


[A_EQ1,A_EQ0] [B_EQ1,B_EQ0] -> (for chanel A and B)
LL EQ for channel loss up to 9.5dB(default)
LH EQ for channel loss up to 13dB
HL EQ for channel loss up to 4.5dB
HH EQ for channel loss up to 7.5dB
[A_DE1,A_DE0] [B_DE1,B_DE0] -> (for chanel A and B)
LL 3.5dB de-emphasis
LH No de-emphasis
HL 2.7dB de-emphasis
HH 5dB de-emphasis

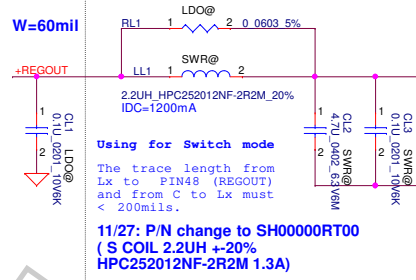
RS11 to Tuning Vswing
Default = 4.99K
RS11 can use 2.5K to 10K

Security Classification		Compal Secret Data		Compal Electronics, Inc.	
Issued Date	2014/08/21	Deciphered Date	2016/11/24	Title	
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Size	Document Number	Rev		0.1	
Custom	FH51M LS-J891P IO Board				
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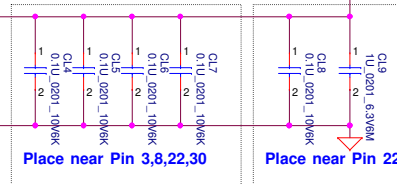
```
From EC
High active.
EN threshold voltage min:1.2V
typ:1.6V max:2.0V
Current limit threshold 1.5~2.8A
+3V_LAN Rising time must >0.5ms and <100ms
```



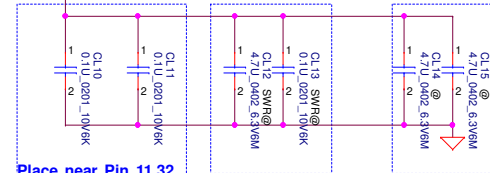
W=60mil



W=60mil
300mA



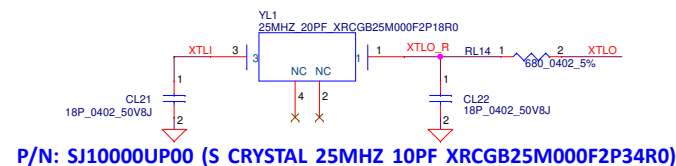
+3V_LAN 300mA Place near Pin 11,32
W=60mil



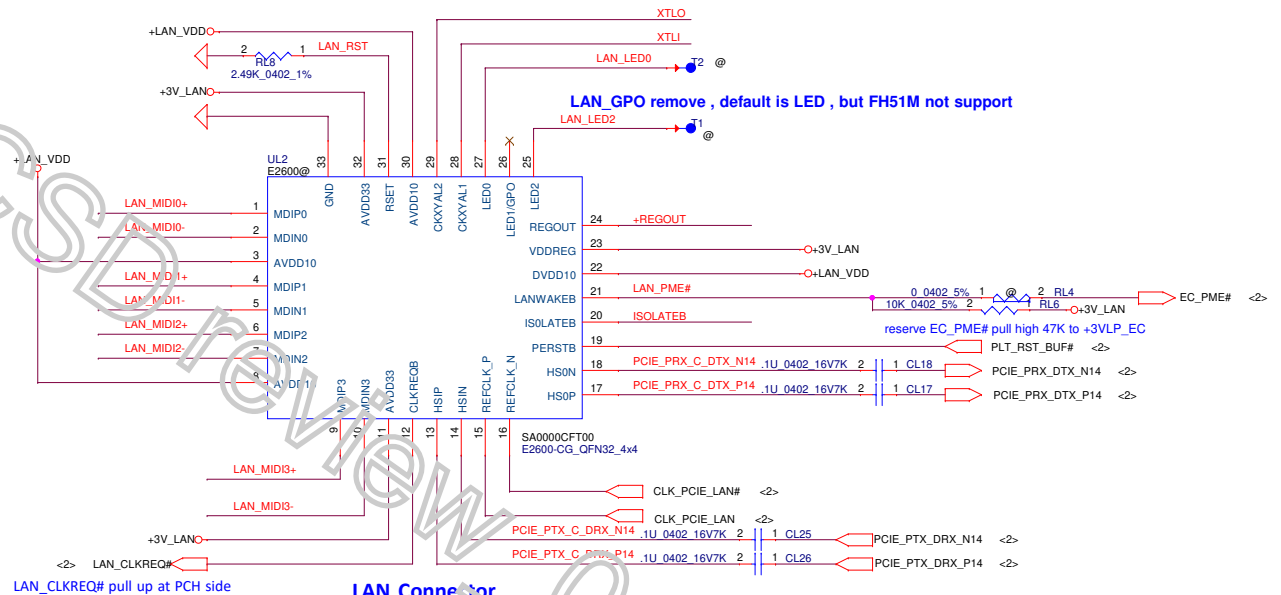
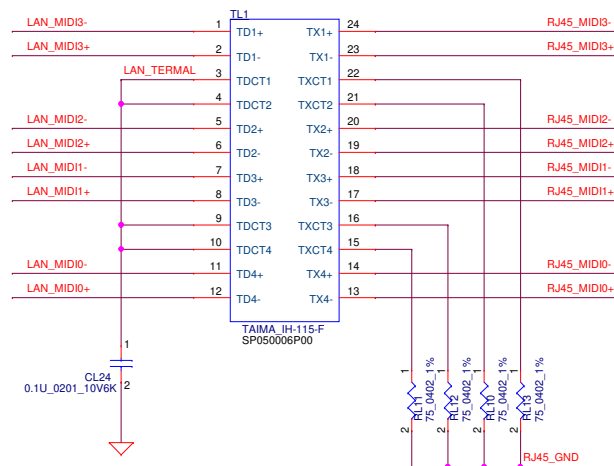
Place near Pin 11,32
Using for Switch mode

The trace length from C to PIN46,47(VDDREG) must < 200mils.

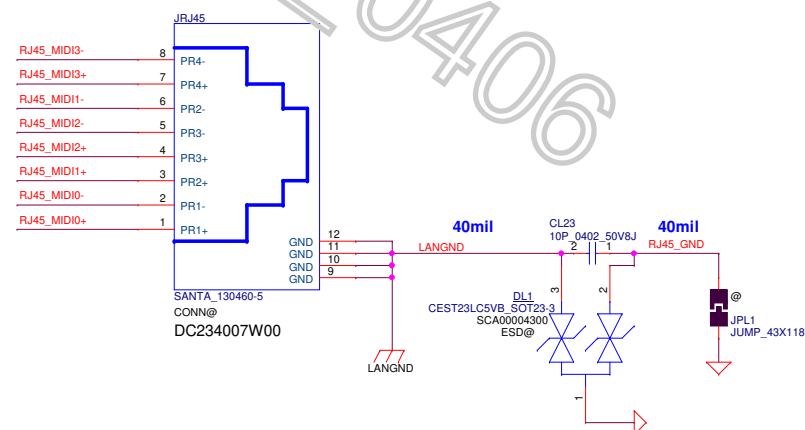
Reserve for surge improvement
Place near Pin 11,32



P/N: SJ10000UP00 (S CRYSTAL 25MHZ 10PF XRCGB25M000F2P34R0)



LAN Connector



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				Size	Document Number	Rev
				Custn	FHS1M LS-J891P IO Board	0.1
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Item	Page #	Title	Date	Request Owner	Issue Description	Solution Description	Rev.
1	2	I/O connector	12/06		Update the pin define for USB re-driver layout		
2	5	LAN IC	12/06		Change the PN to correct pin		
3	2	Audio	12/11		Change R8/R9 from 62ohm to 0ohm(vender request)		
4	3/5	R short	01/16		Change RS1/RL2 from 0 ohm to R-short		
For CSD review_0406							