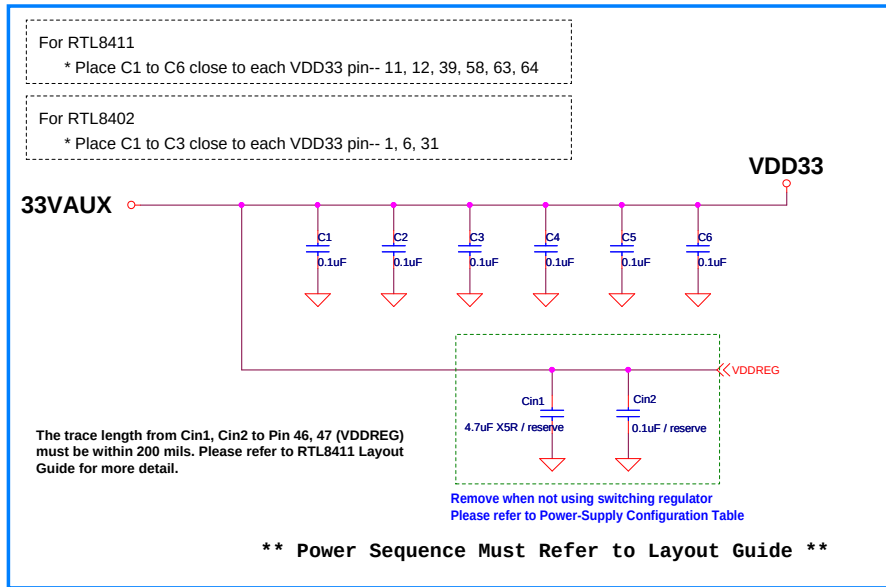


RTL8411/RTL8402 64/48 Pin Reference Schematic V101

PAGE INDEX

- 1. Title Page
- 2. Power
- 3. QFN64 Controller
- 4. QFN48 Colay
- 5. Card Reader
- 6. Optional Function
- 7. Change Notice

3.3V Power



Power-Supply Configuration Table

	mode	Cin1,2	R2	Lx	Cout1,2	R3	R30	R33	C44
RTL8411	SWR	O	X	O	O	O	O	X	X
RTL8411	LDO	X	O	X	X	O	X	O	X
RTL8411	External	X	X	X	X	O	X	O	O
RTL8402	LDO	X	X	X	X	X	X	X	X

**** If only one 1.0V supply source is selected. You may do the following option to save RBOM ****

RTL8411 only (No Colay)

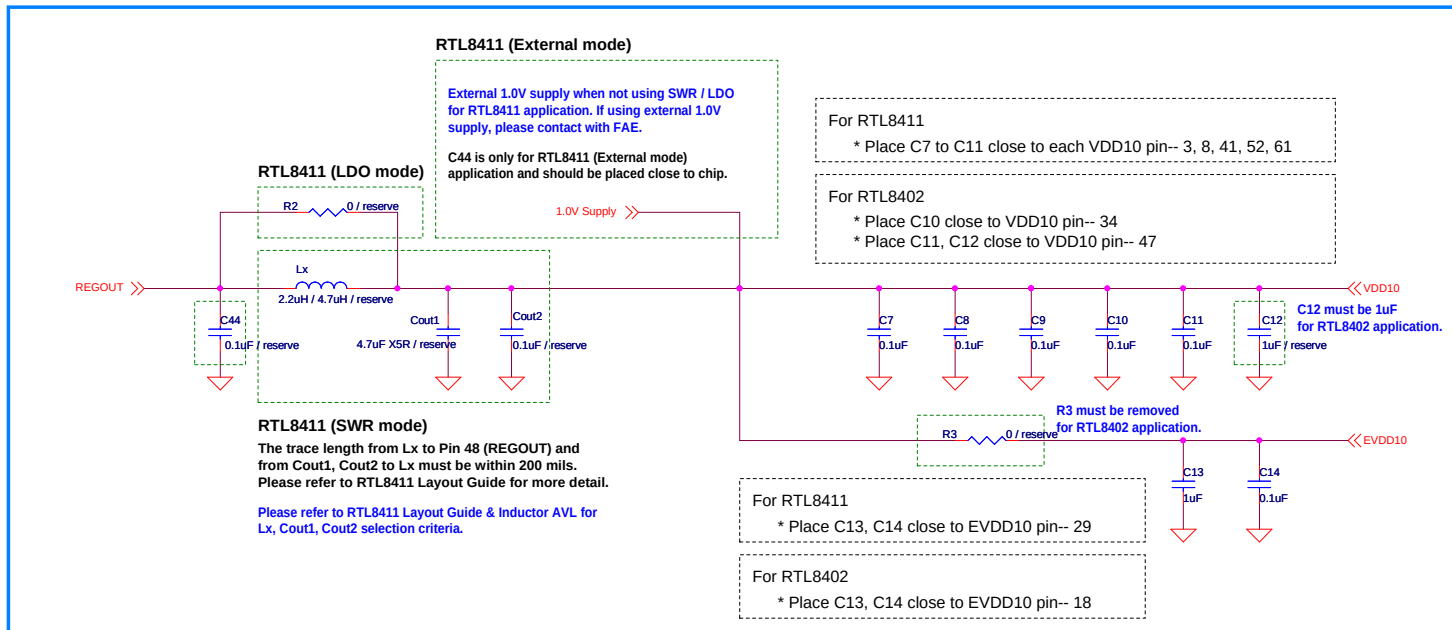
1. SWR mode only
=> R3, R30 short
2. LDO mode only
=> R2, R3, R33 short
3. External Supply only
(1) R3, R33 => short

RTL8411 Colay RTL8402

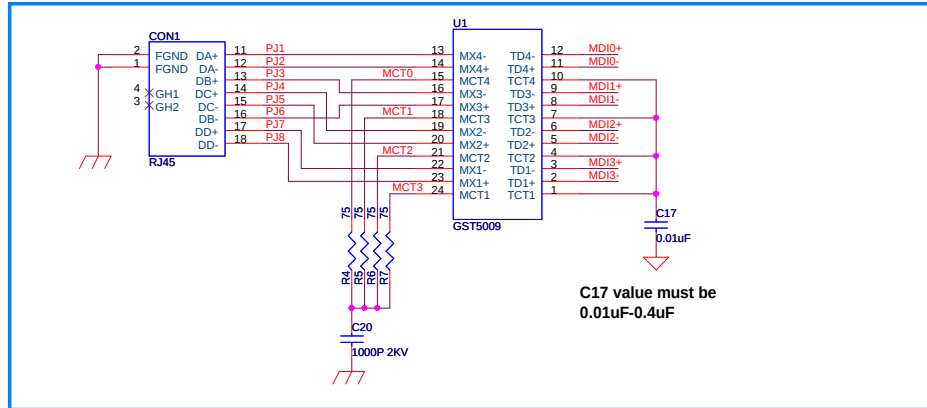
1. SWR mode only
=> R30 short
2. LDO mode only
=> R2, R33 short
3. External Supply only
(1) R33 => short

**** R3 is necessary for RTL8411 colay RTL8402****

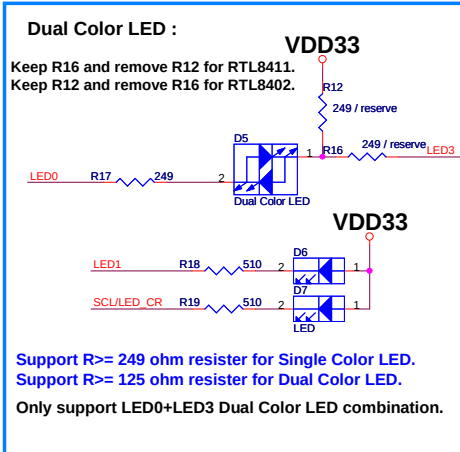
1.0V Power



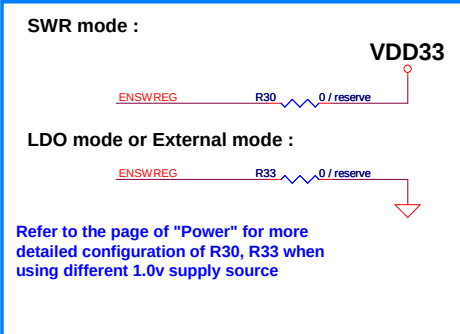
Connector



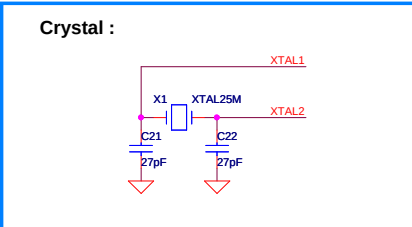
LED



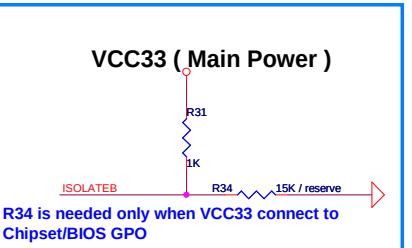
Power Mode (RTL8411 Only)



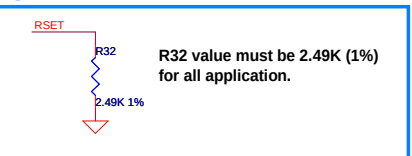
Clock Source



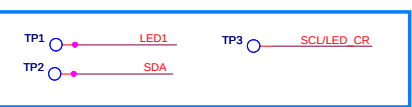
Main Power



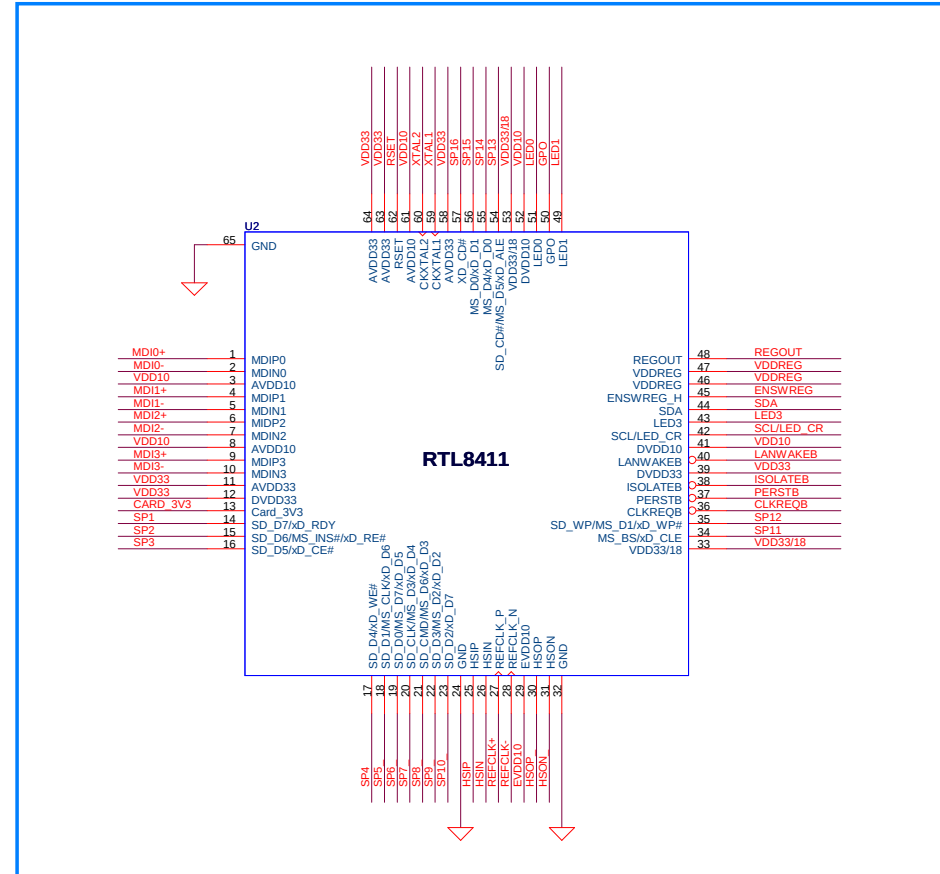
RSET



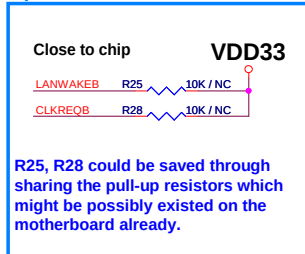
Test Point



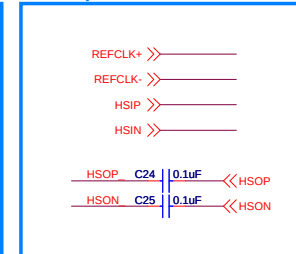
RTL8411



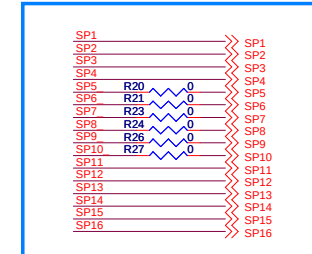
Open Drain



PCI Express Interface



Card Reader Interface



A

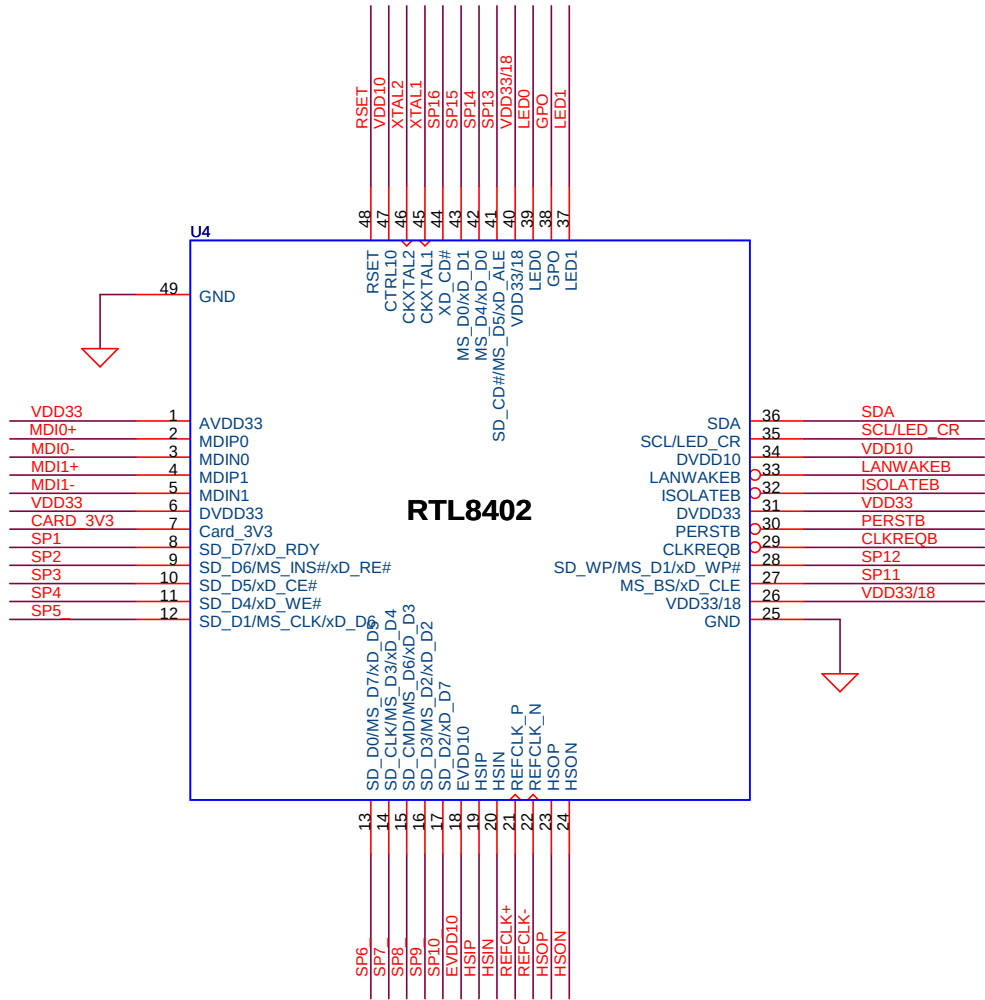
B

C

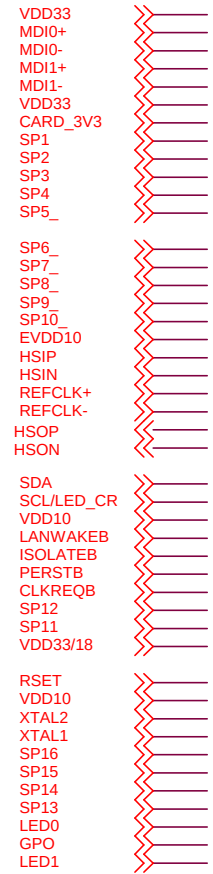
D

E

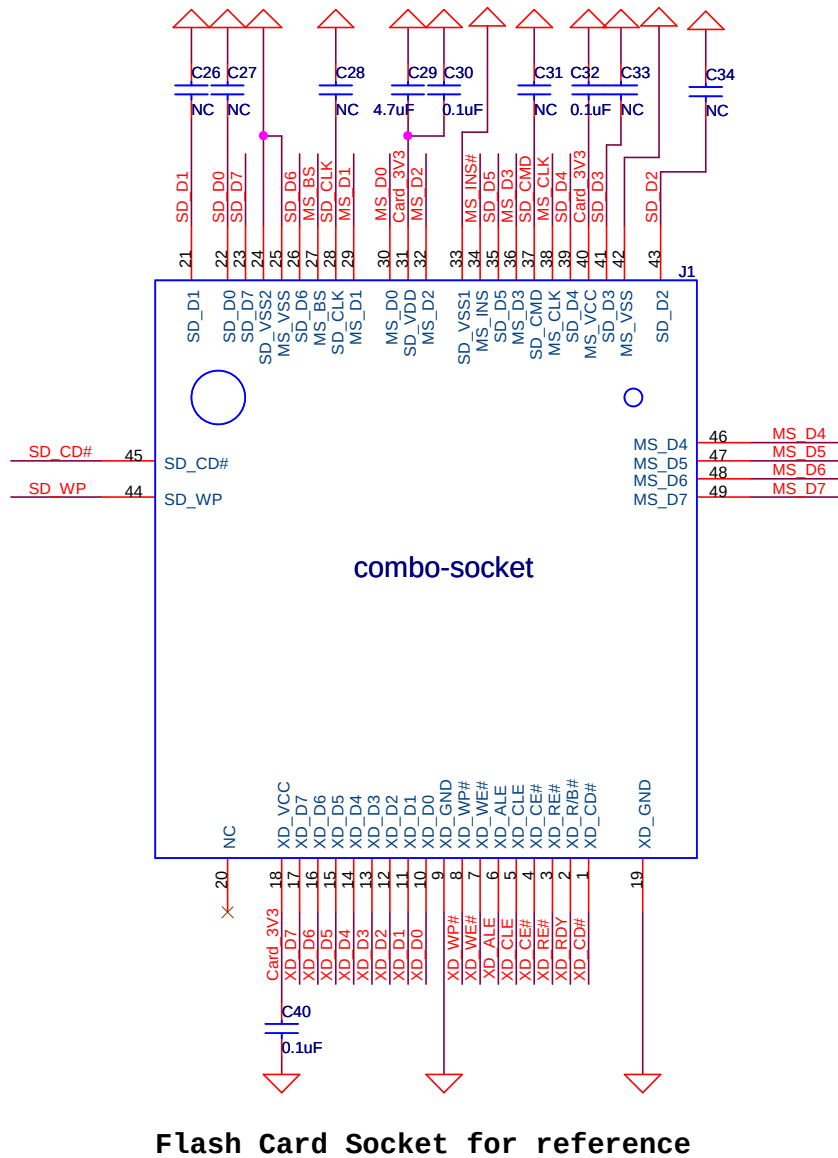
RTL8402



RTL8411 / 8402 Colay



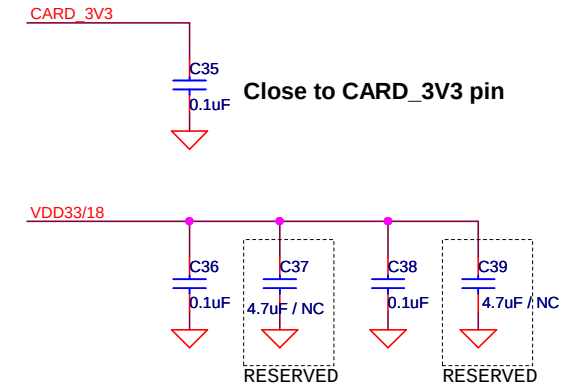
Card Reader



Share Pin

SP1	SP1	SD D7	xD_RDY
SP2	SP2	SD D6	xD_RE#
SP3	SP3	SD D5	xD_CE#
SP4	SP4	SD D4	xD_WE#
SP5	SP5	SD D1	xD D6
SP6	SP6	SD D0	xD D5
SP7	SP7	SD CLK	xD D4
SP8	SP8	SD CMD	xD D3
SP9	SP9	SD D3	xD D2
SP10	SP10	SD D2	xD D7
SP11	SP11	MS BS	xD CLE
SP12	SP12	SD WP	xD WP#
SP13	SP13	SD CD#	xD ALE
SP14	SP14	MS D4	xD D0
SP15	SP15	MS D0	xD D1
SP16	SP16		xD CD#

Power



For RTL8411

- * Place C36, C37 close to VDD33/18 pin-- 33
- * Place C38, C39 close to VDD33/18 pin-- 53

For RTL8402

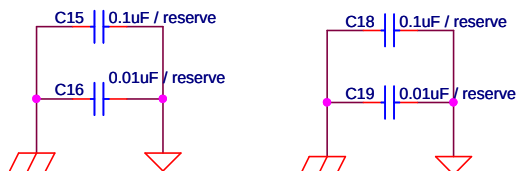
- * Place C36, C37 close to VDD33/18 pin-- 26
- * Place C38, C39 close to VDD33/18 pin-- 40

Reserved for LAN / PHY Disable Function

GPO

Connect to the control circuit, like SuperIO, with pull-high or pull-low capability. Please refer to LAN / PHY Disable Application Note.

Reserved for Noise Isolation



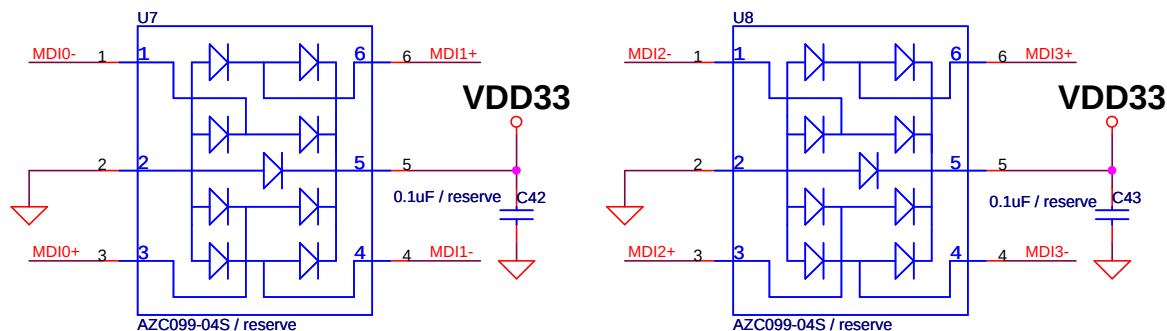
C15, C16, C18, C19 Reserved for Noise Isolation between Chassis GND and System GND (optional)

Reserved for External Clock Source

External Clock >>> XTAL2

XTAL2 is the external clock input pin. XTAL1 must be floating when using oscillator or external clock.

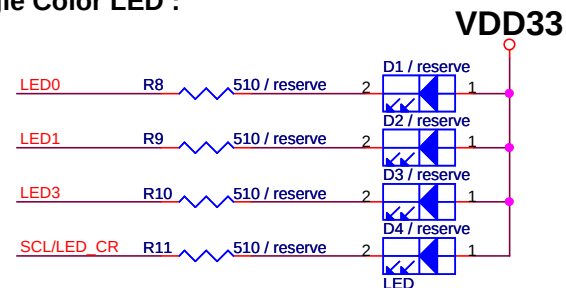
Reserved for TVS Component



U7, U8 and C42, C43 are reserved for Surge and Cable ESD (optional)

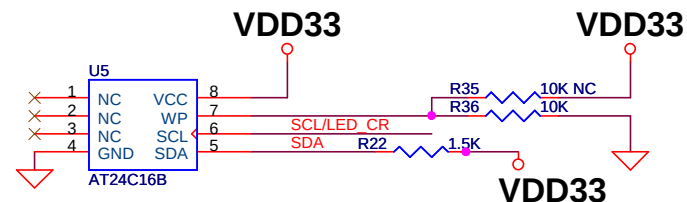
Optional LED Configuration

Single Color LED :



R8, R9, R10, R11 and D1, D2, D3, D4 Reserved for only Single Color LED Configuration (optional)

TWSI (Optional)



Realtek Semiconductor Corp.		
No.2, Industry E. Rd. IX, Science-Based Industrial Park, Hsinchu, Taiwan 300		
Title		
RTL8411/8402 Reference Schematic : OPTIONAL FUNCTION		
Size	Document Number	Rev
A4	RTL8411_8402_REFERENCE_SCHEMATIC_V101.DSN	101
Date:	Tuesday, September 06, 2011	Sheet 6 of 7

Change Notice from 1.00 to 1.01

- 1. Move all optional components to Page 6 (Optional Function)
- 2. Add Power selection guide to Page 2 (Power)
- 3. Add Test Point to page 3 (QFN64 Controller)
- 4. Remove Power On Latch on page 3 (QFN64 Controller)

Realtek Semiconductor Corp.		
No.2, Industry E. Rd. IX, Science-Based Industrial Park, Hsinchu, Taiwan 300		
Title		
RTL8411/8402 Reference Schematic : OPTIONAL FUNCTION		
Size	Document Number	Rev
A	RTL8411_8402_REFERENCE_SCHEMATIC_V101.DSN	101
Date:	Wednesday, September 07, 2011	Sheet 7 of 7