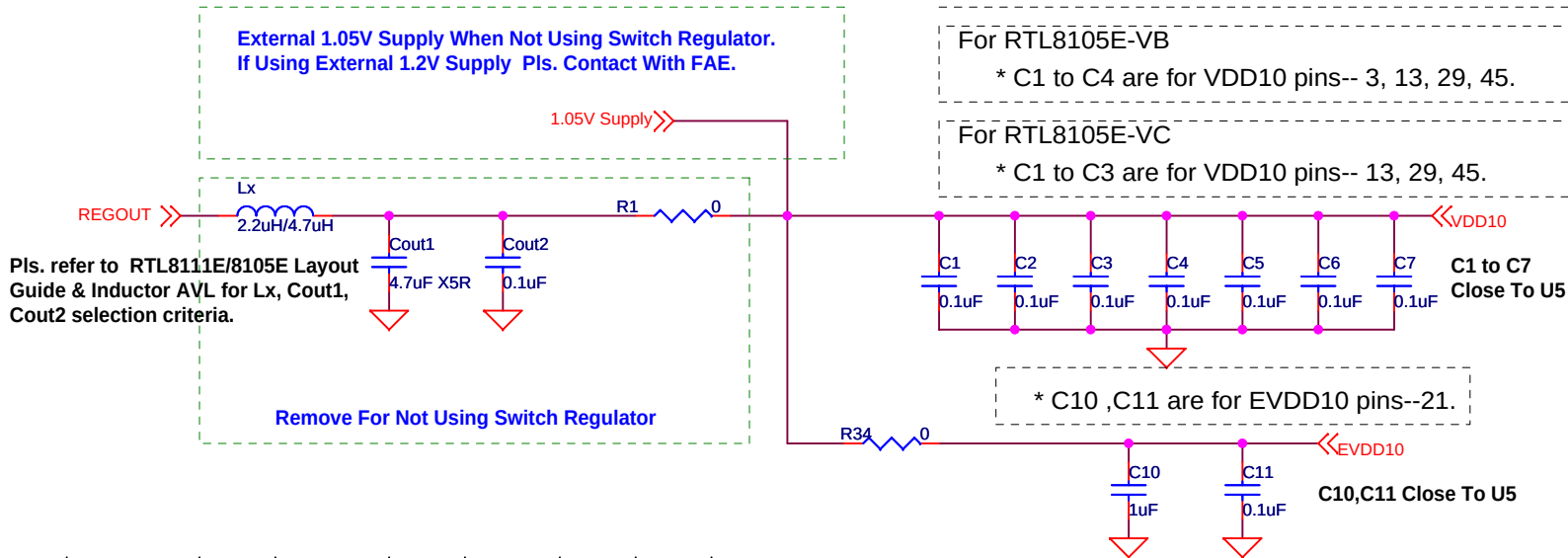


*RTL8111E/RTL8105E 48Pin
Reference Schematic V108*

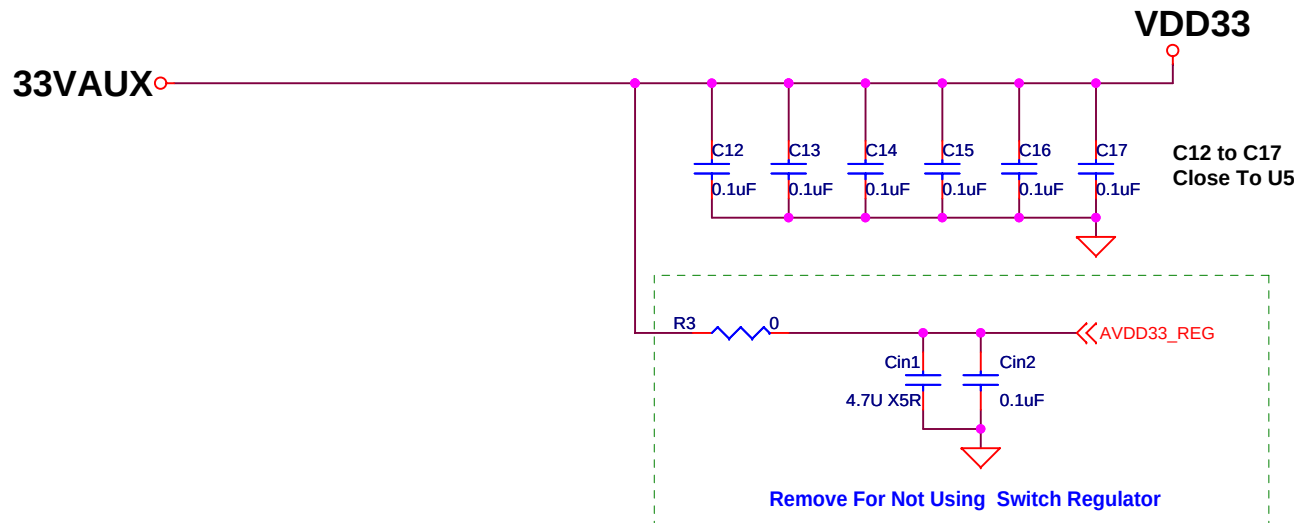
PAGE INDEX

- 1. Title Page*
- 2. POWER*
- 3. CONTROLLER*
- 4. Optional Function*
- 5. Change Notes*

Realtek Semiconductor Corp.		
No.2, Industry E. Rd. IX, Science-Based Industrial Park, Hsinchu, Taiwan 300		
Title		
RTL8111E/8105E Reference Schematic: Index		
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A4	RTL8111E/8105E Reference Schematic	
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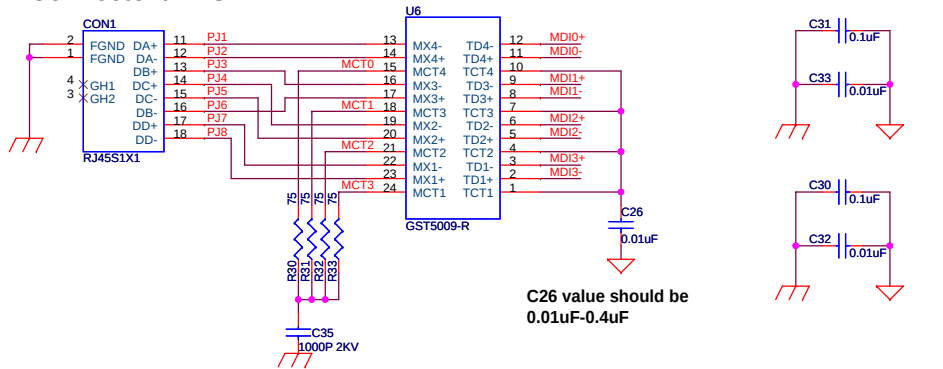
	mode	Lx	Cout1,2	R1	Cin1,2	R3	R23	R24
8111E-Series/8105E-VB/8105E-VC	SWR	O	O	O	O	O	O	X
8105E-VC	LDO	X	X	X	X	X	X	O
8111E-Series/8105E-VB	External	X	X	X	X	X	X	O
8105E-VC	External	X	X	X	X	X	O	X



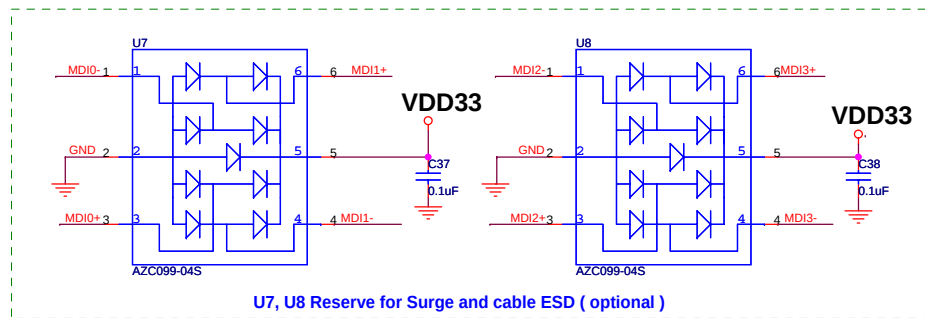
- For RTL8111E- Series
* C12 to C17 are for VDD33 pins-- 12, 27, 39, 42, 47, 48.
- For RTL8105E-VB
* C12 to C16 are for VDD33 pins-- 27, 39, 42, 47, 48.
- For RTL8105E-VC
* C12 to C15 are for VDD33 pins-- 27, 39, 47, 48.

****Power Sequence Must Refer to Layout Guide.****

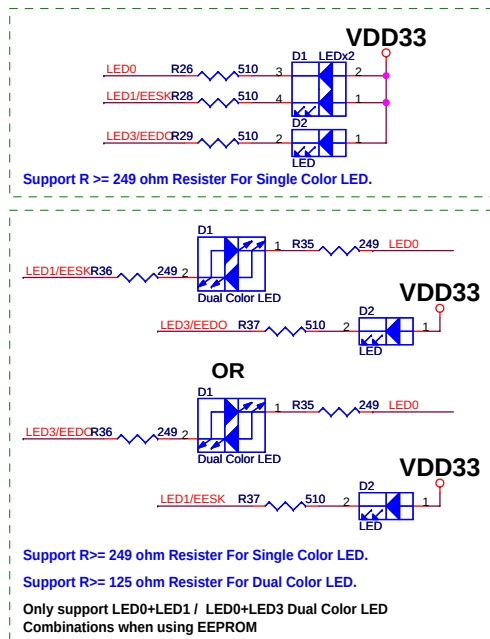
Connector / TVS



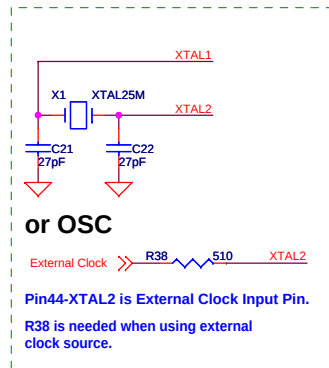
C26 value should be 0.01uF-0.4uF



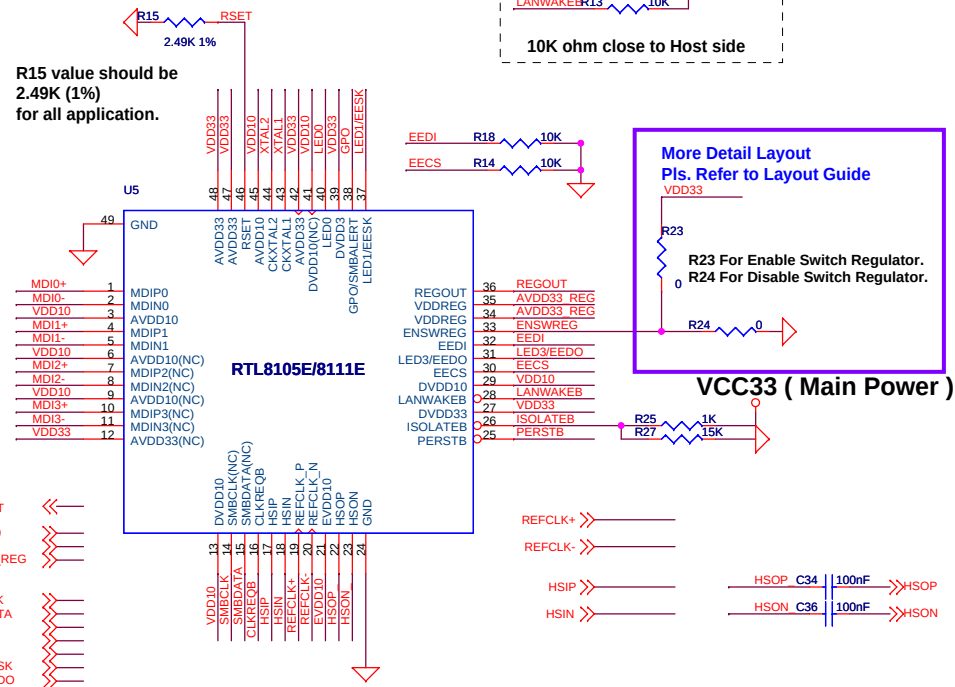
LED



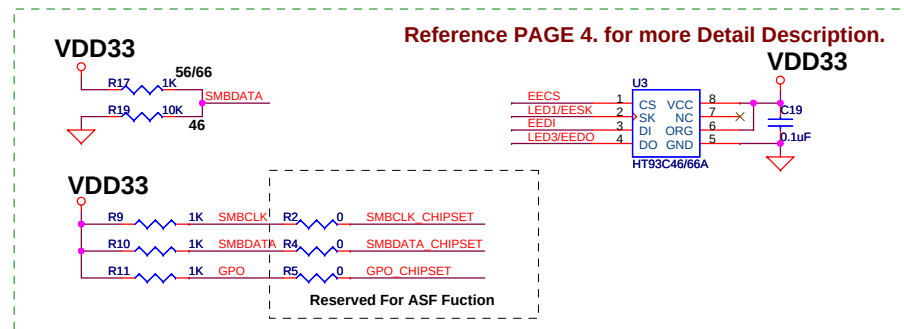
XTAL



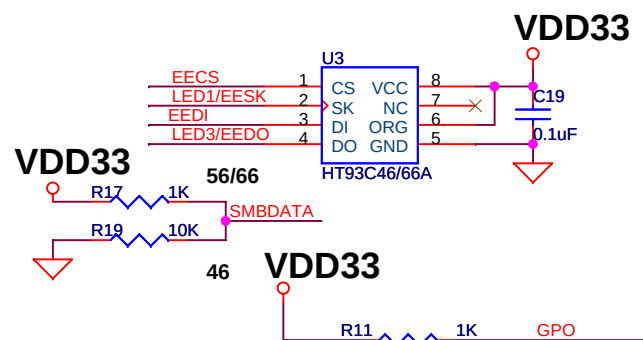
Controller



Function (EEPROM, Efuse, ASF)

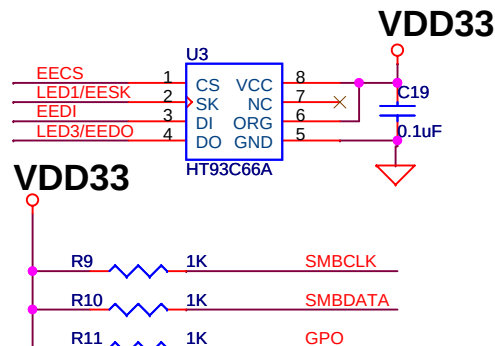


For RTL8111E Series EEPROM / ASF / Efuse Function (3 Option)



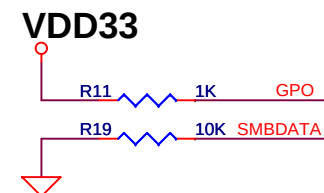
1. When using EEPROM only without ASF function.
Using R17 For 93C56/66
Using R19 For 93C46

Note: For RTL8111E-VL R17 must be 1K.



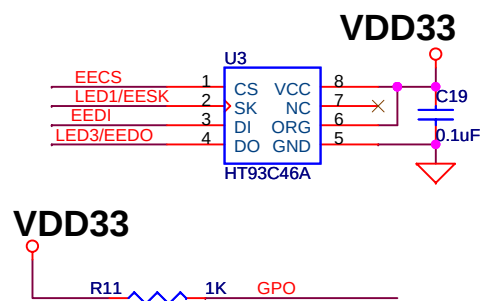
2. When Using EEPROM(Only 93C66) With ASF function

Note: This block is also for RTL8111E-VC using EEPROM Less with ASF function.

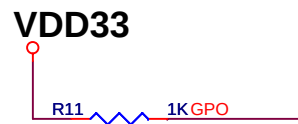


3. When using EFuse only without ASF.

For RTL8105E-VB/8105E-VC EEPROM / Efuse Function (2 Option)



1. When using EEPROM (93C46A)



2. When using EFuse

SMBCLK
SMBDATA
GPO
EEDI
EECS
LED1/EESK
LED3/EEDO

Remove R11 for RTL8105E-VC.

Change Notice from 1.00 to 1.01

- 1. C17 rename to Cin1, C18 rename to Cin2. C8 rename to Cout1, C9 rename to Cout2, L1 rename to Lx to align with SWR Layout Guide (Page 2.)
- 2. Add supported resistor values for Dual Color LED, supported combinations when using EEPROM (Page 3.)
- 3. Add R38 for external clock circuit. (Page 3.)

Change Notice from 1.01 to 1.02

- 1. Update Pin name(Pin3, Pin47) For RTL8105E.(Page 3.)
- 2. Update Capacitor Description For RTL8105E and RTL8111E. (Page 2.)
- 3. Modify Center tap Schematic for Power Optimization. Center tap short and coconnector 1uF to GND.(Page 3.)
- 4. Add RTL8105E Optional Function Schematic.(Page 4.)

Change Notice from 1.02 to 1.03

- 1. Modify Efuse Autoload Schematic, SMBDATA Pull Down. (Page 4.)

Change Notice from 1.03 to 1.04

- 1. Remove TWSI Schematic. (Page 3 & 4.)
- 2. Remove TWSI Share Pin Name. (Page 3 & 4.)
- 3. Add Note For Lanwakeb & Clkreqb.(Page 3.)
- 4. Add Note For Function Option for Using Efuse/BIOS Patch.(Page 4.)

Change Notice from 1.04 to 1.05

- 1. Add Resister For SMB Bus.(Page 3.)
- 2. Add C26 Value Note.(Page 3.)
- 3. Add SWR Power Sequence Note.(Page2.)

Change Notice from 1.05 to 1.06

- 1. Modify Power Mode Table. (Page 2.)
- 2. Remove C4, C16 For RTL8105E-VC. (Page 2.)
- 3. Modify Lx Value and Update Note. (Page 2.)
- 4. Modify C26 Value Note. (Page 3.)

Change Notice from 1.06 to 1.07

- 1. Remove XTAL14.318M from XTAL Circuit. (Page 3.)

Change Notice from 1.07 to 1.08

- 1. Modify R17 Value. (Page 3.)
- 2. Modify R17 Value. (Page 4.)
- 3. Add note for RTL8111E-VL and RTL8111E-VC (Page 4.)
- 4. Remove R11 for RTL8105E-VC. (Page 4.)

Realtek Semiconductor Corp.			
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Title			
RTL8111E/8105E Reference Schematic: Change Notes			
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