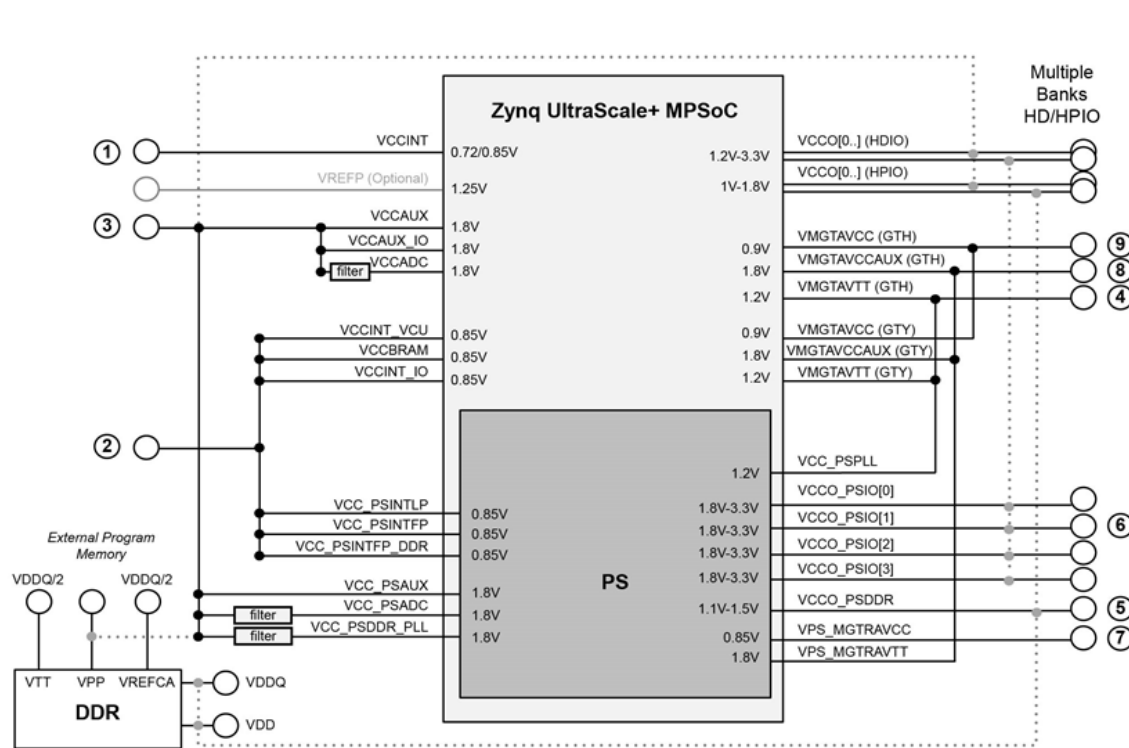
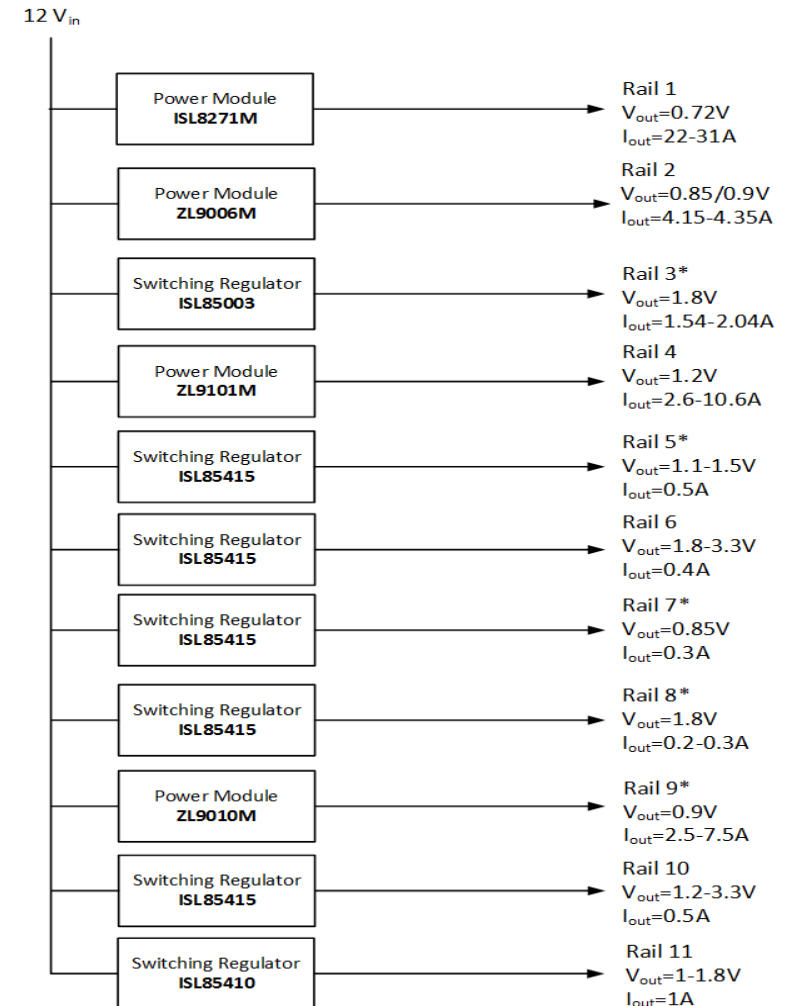


USECASE 2 #4



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Rail	Voltage	Power Supply Rails
Rail 1	0.72/0.85V	VCCINT
Rail 2	0.85/0.9V	VCC_PSINTFP, VCC_PSINTLP, VCC_PSINTFP_DDR, VCCINT_VCU, VCCINT_IO, VCCBRAM
Rail 3*	1.8V*	VCC_PSAUX, VCCAUX, VCCAUX_IO, VCC_PSDDR_PLL, VCCADC, VCC_PSADC
Rail 4*	1.2V*	VMGTAVTT(GTH), VMGTAVTT(GTY), VCC_PSPLL
Rail 5	1.1-1.5V	VCCO_PSDDR
Rail 6	1.8-3.3V	VCCO_PSIO
Rail 7*	0.85V*	VPS_MGTRAVCC
Rail 8*	1.8V*	VMGTAVCC(GTH), VMGTAVCC(GTY), VPS_MGTRAVTT
Rail 9*	0.9V*	VMGTAVCC(GTH), VMGTAVCC(GTY)
Rail 10	1.2-3.3V	HDIO_VCCO
Rail 11	1-1.8V	HPIO_VCCO

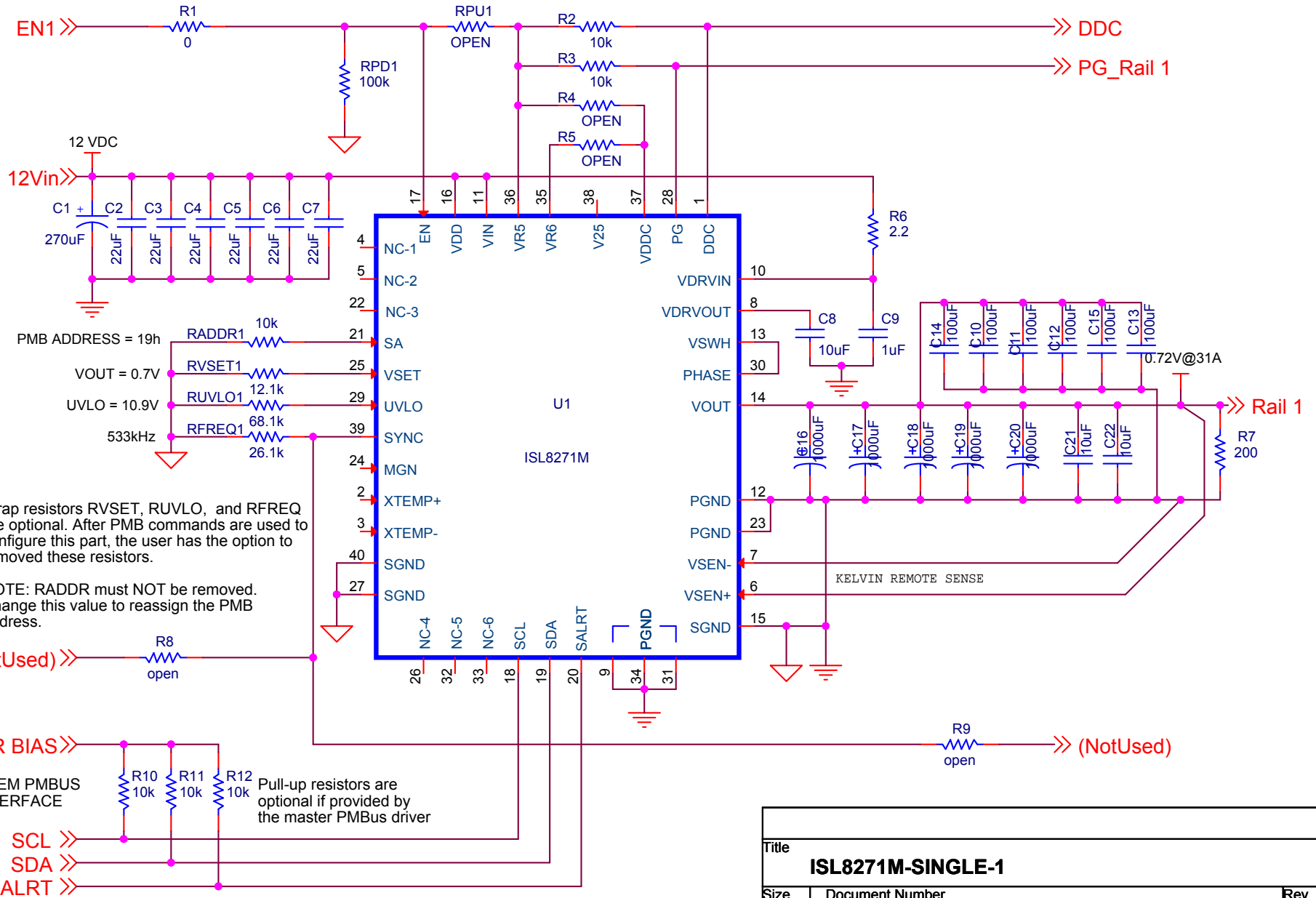


Title	ZYNQ US+ MPSoC Power Rails	
Size	Document Number	Rev
B	<Doc>	A
Date:	Thursday, March 09, 2017	Sheet 1 of 12

ISL8271M SINGLE OUTPUT (33A)

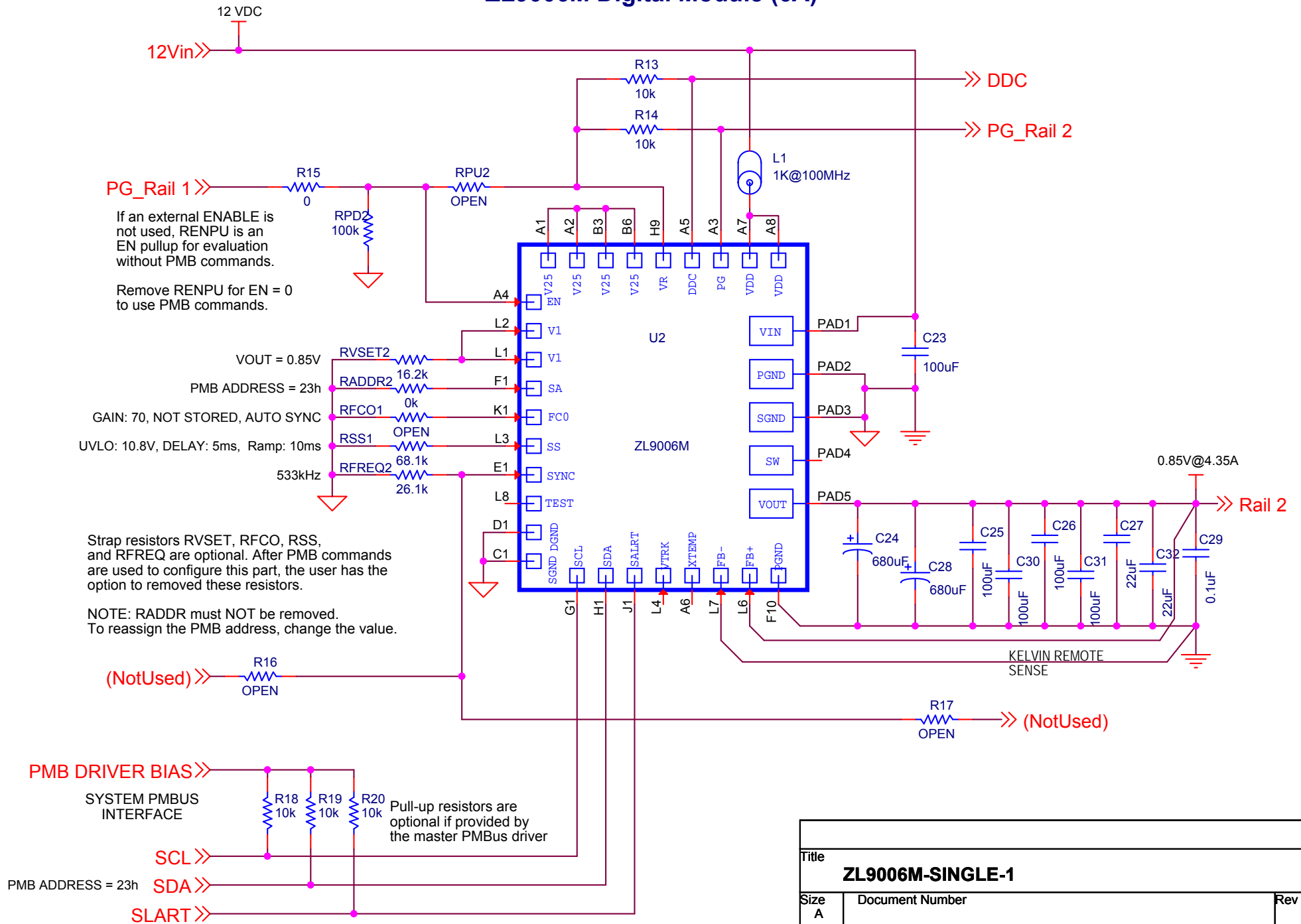
If an external ENABLE is not used, resistor RPU is a Enable pullup for initial evaluation without PMB commands.

Remove RPU and install RPD = 100k to make EN low to allow the use of PMB commands.



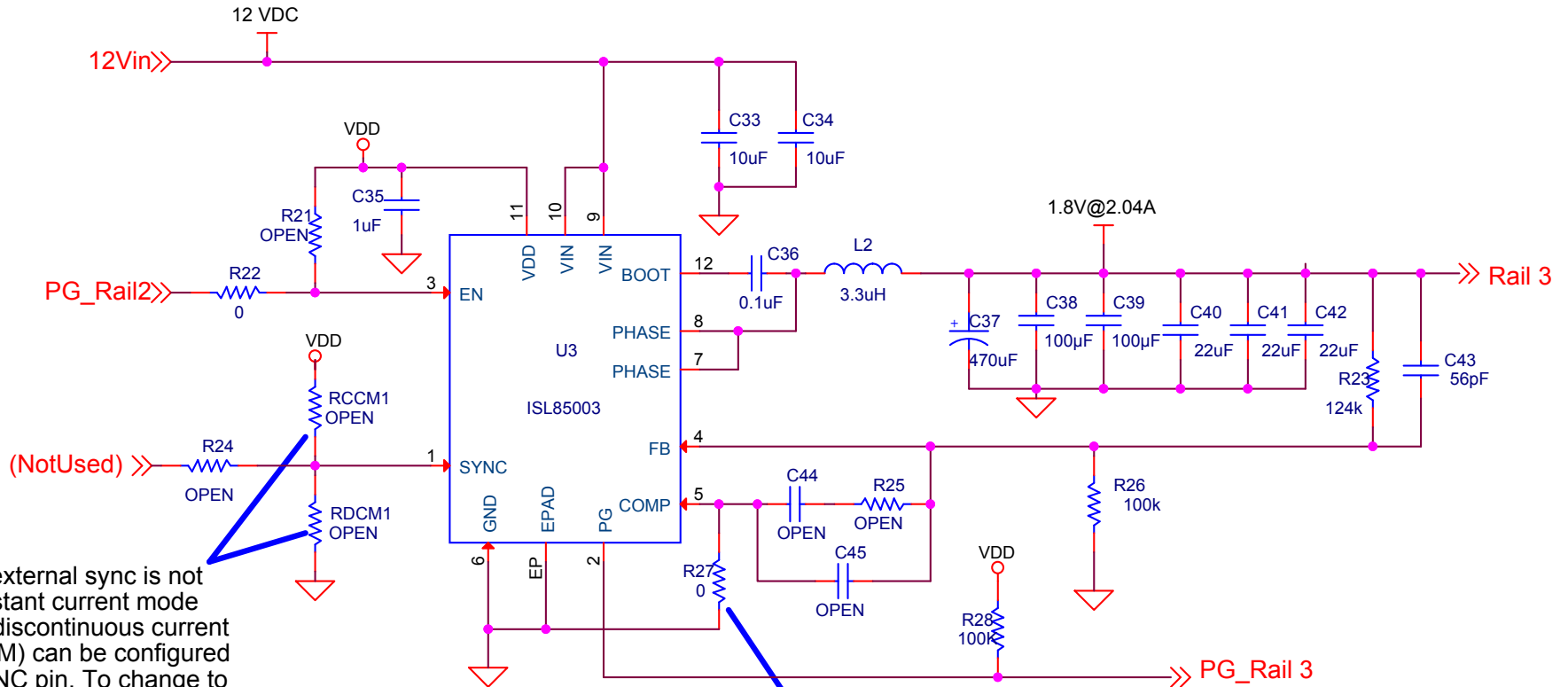
Title		
ISL8271M-SINGLE-1		
Size	Document Number	Rev
A		
Date:	Sheet 2 of 12	

ZL9006M Digital Module (6A)



Title		
ZL9006M-SINGLE-1		
Size A	Document Number	Rev
Date:	Sheet 3	of 12

ISL85003 SINGLE OUTPUT (3A)



When an external sync is not used, constant current mode (CCM) or discontinuous current mode (DCM) can be configured on the SYNC pin. To change to DCM mode, remove RCCM, and change RDCM to 0 ohms.

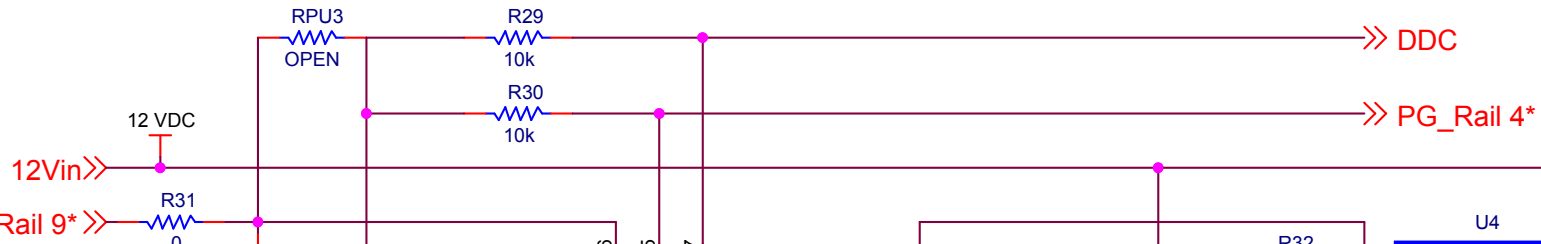
If custom compensation is desired, remove the ground connection on the COMP pin to enable external compensation.

OPEN value components on the COMP pin are place holders if external compensation is used.

Programmable Soft Start is available in the ISL85003A (without synchronization)

Title		
ISL85003-SINGLE-1		
Size	Document Number	Rev
A	<Doc>	<RevCo
Date:	Thursday, March 09, 2017	Sheet 4 of 12

ZL9101M Digital Module (12A)



If an external ENABLE is not used, RENPU is an EN pullup for evaluation without PMB commands.
Remove RENPU for EN = 0 to use PMB commands.

PMB ADDRESS = 1Ah
VOUT = 1.2V
571kHz

Strap resistors RVSET and RFREQ are optional. After PMB commands are used to configure this part, the user has the option to removed these resistors.

NOTE: RADDR must NOT be removed. To reassign the PMB address, change the value.



PMB DRIVER BIAS

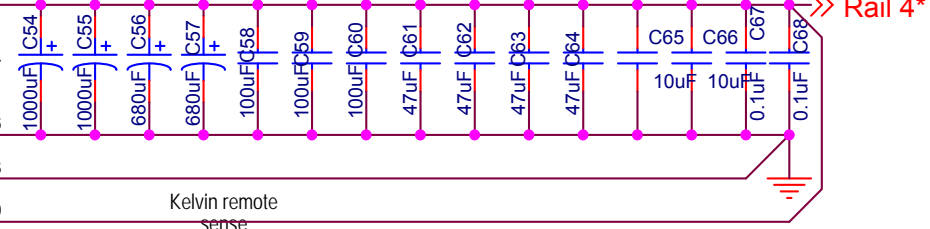
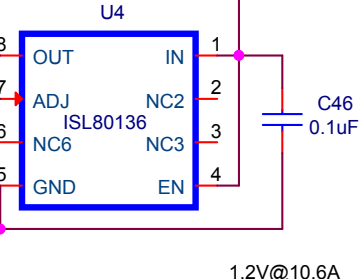
SYSTEM PMBUS INTERFACE

SCL

SDA

PMB ADDRESS = 1Ah

Hardware SALRT not available in the ZL9101M



Title		
ZL9101M-SINGLE-1		
Size	Document Number	Rev
A		
Date:	Sheet	5 of 12

ISL85415 SINGLE OUTPUT (500mA)

Vin range: 3-40V

12VDC

12Vin

PG_Rail 7*

Native Freq=500kHz

SoftStart = 10ms

+5V

RPWM1 100K

RPFM1 OPEN

WHEN AN EXTERNAL SYNC IS NOT USED, THE DEFAULT MODE IS PWM.

TO CHANGE TO PFM MODE, REMOVE RPWM, AND CHANGE RPFM TO 10k.

ISL85415

U6

BOOT

PHASE

FB

COMP

VCC

PG

PGND

EPAD

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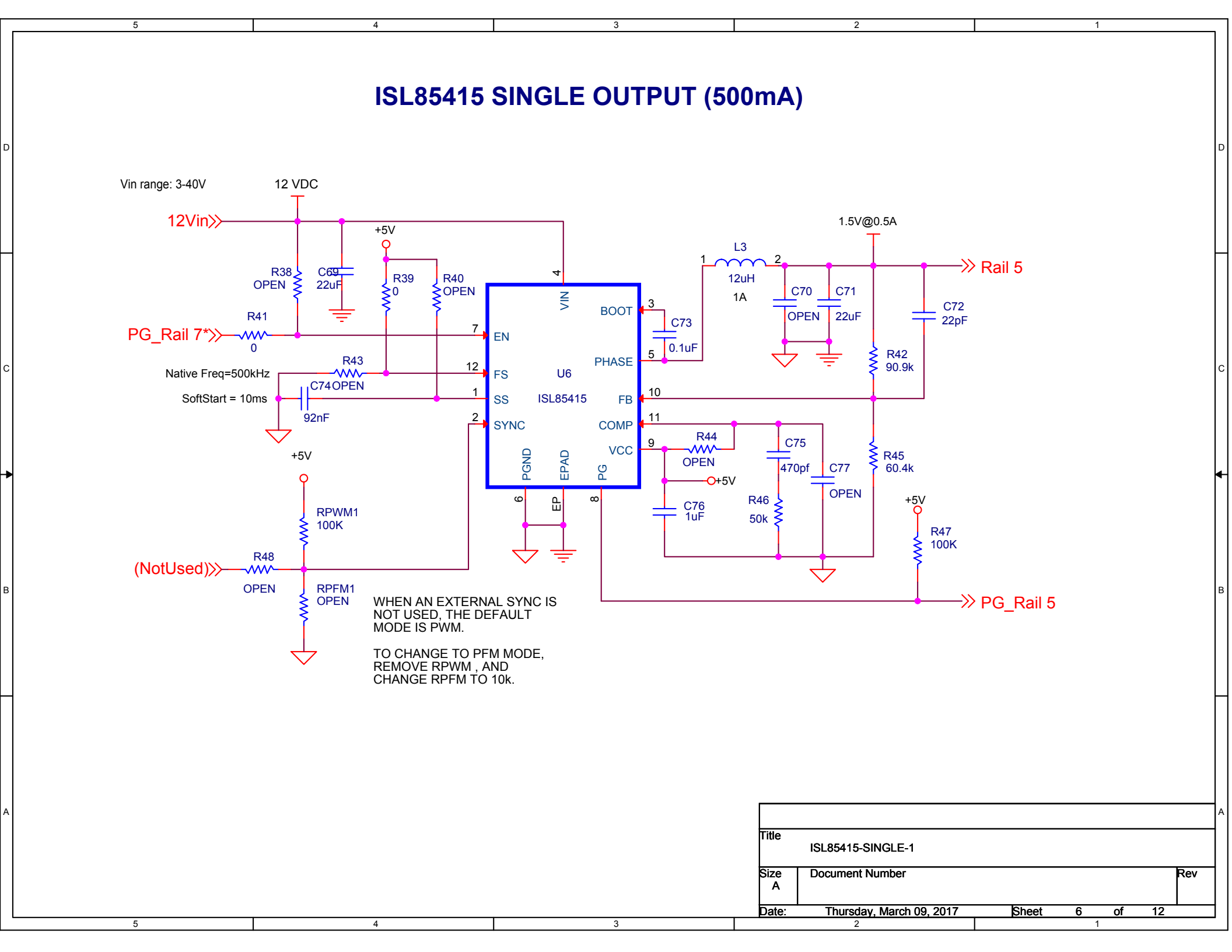
490

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ISL85415 SINGLE OUTPUT (500mA)

Vin range: 3-40V

12VDC

12Vin

PG_Rail 7*

Native Freq=500kHz

SoftStart = 10ms

+5V

RPWM1 100K

RPFM1 OPEN

WHEN AN EXTERNAL SYNC IS NOT USED, THE DEFAULT MODE IS PWM.

TO CHANGE TO PFM MODE, REMOVE RPWM, AND CHANGE RPFM TO 10k.

U6 ISL85415

BOOT

PHASE

FB

COMP

VCC

PG

PGND

EPAD

L3 12uH 1A

C70 OPEN

C71 22uF

C72 22pF

R42 90.9k

R45 60.4k

R47 100K

C73 0.1uF

C74 OPEN

C75 470pf

C76 1uF

R44 OPEN

R46 50k

R47 100K

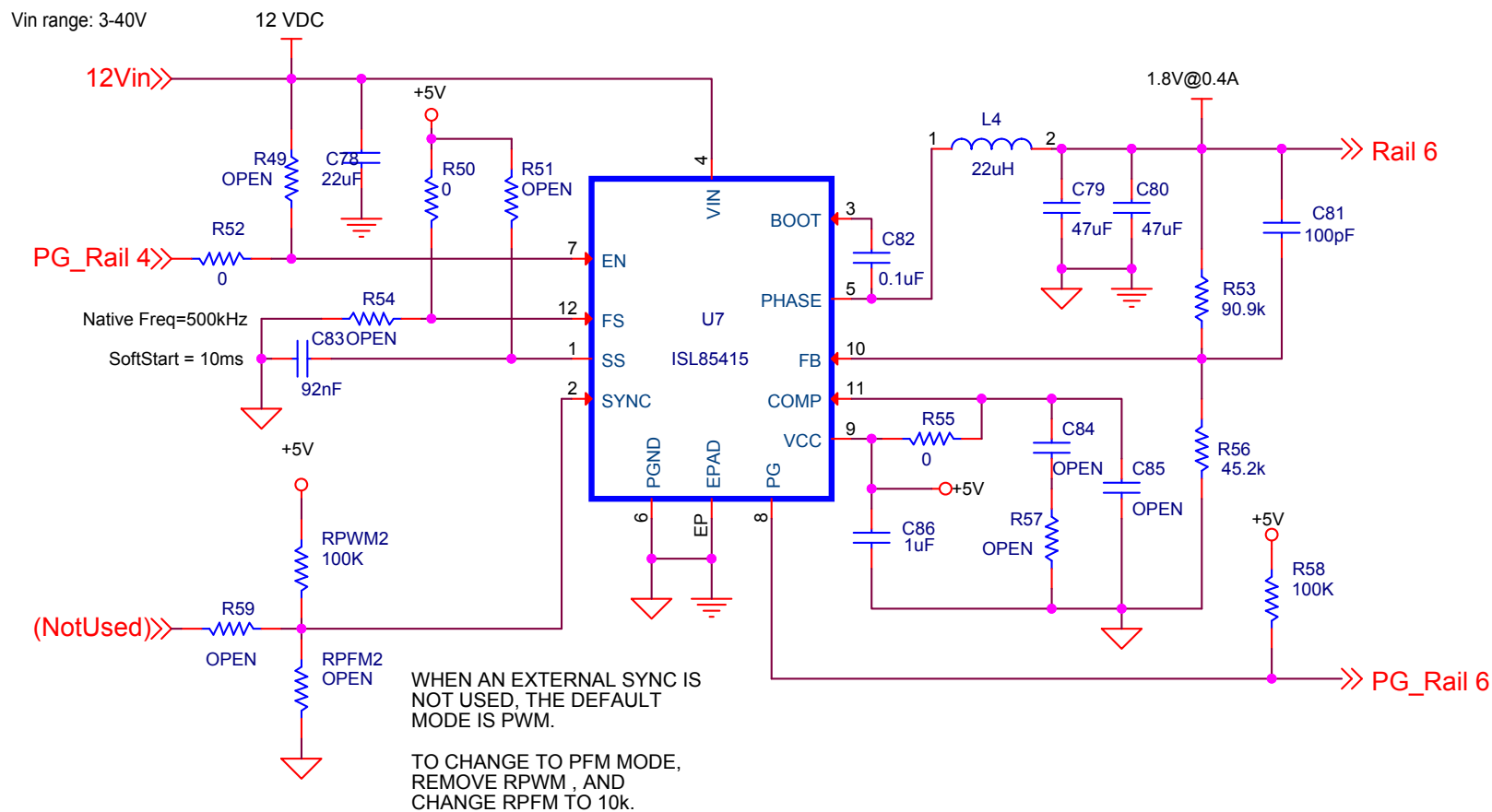
1.5V@0.5A

Rail 5

PG_Rail 5

Title		
ISL85415-SINGLE-1		
Size	Document Number	Rev
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Date: Thursday, March 09, 2017		Sheet 6 of 12

ISL85415 SINGLE OUTPUT (500mA)



Title
ISL85415-SINGLE-1

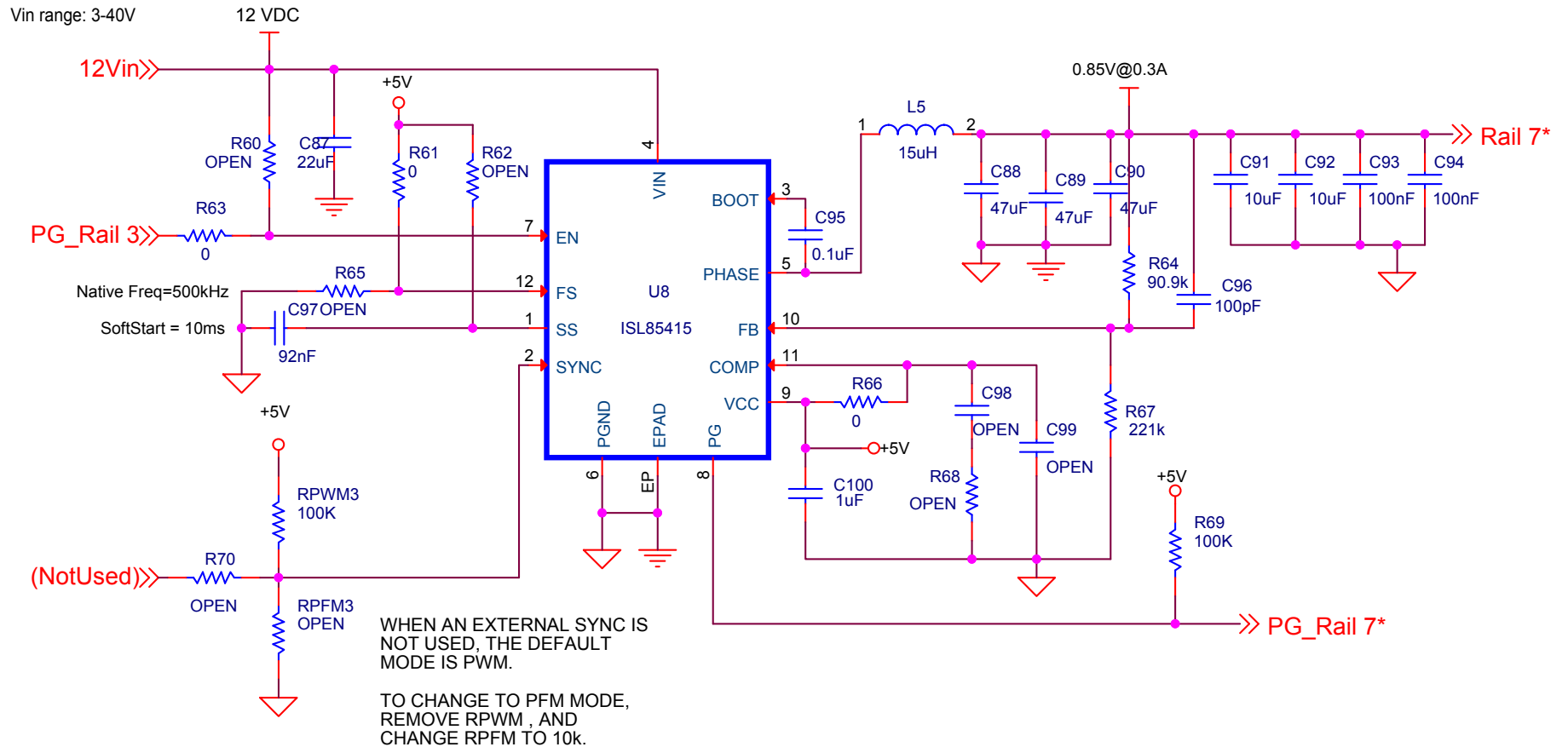
Size A
Document Number

Rev

Date: Thursday, March 09, 2017

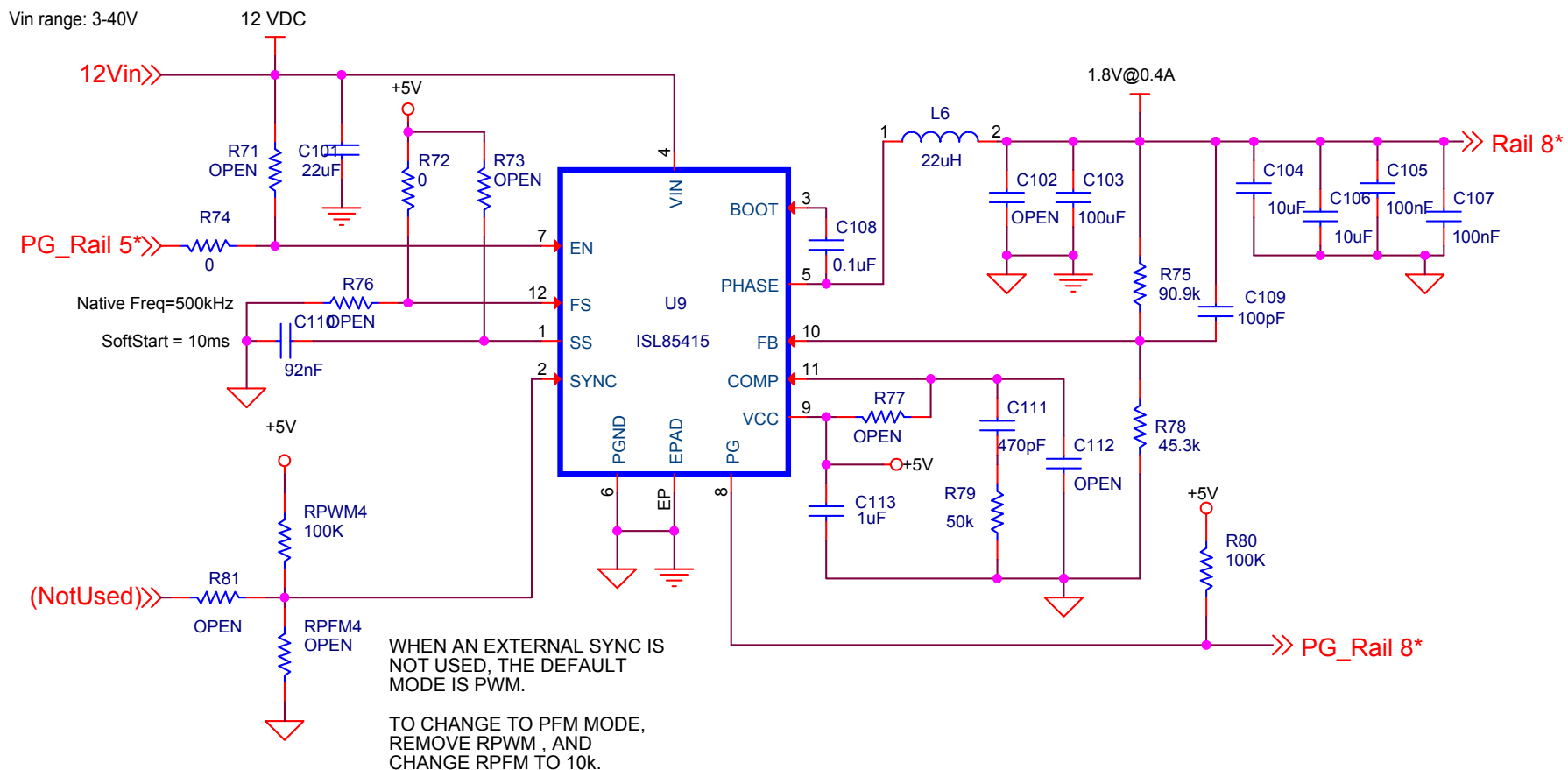
Sheet 7 of 12

ISL85415 SINGLE OUTPUT (500mA)



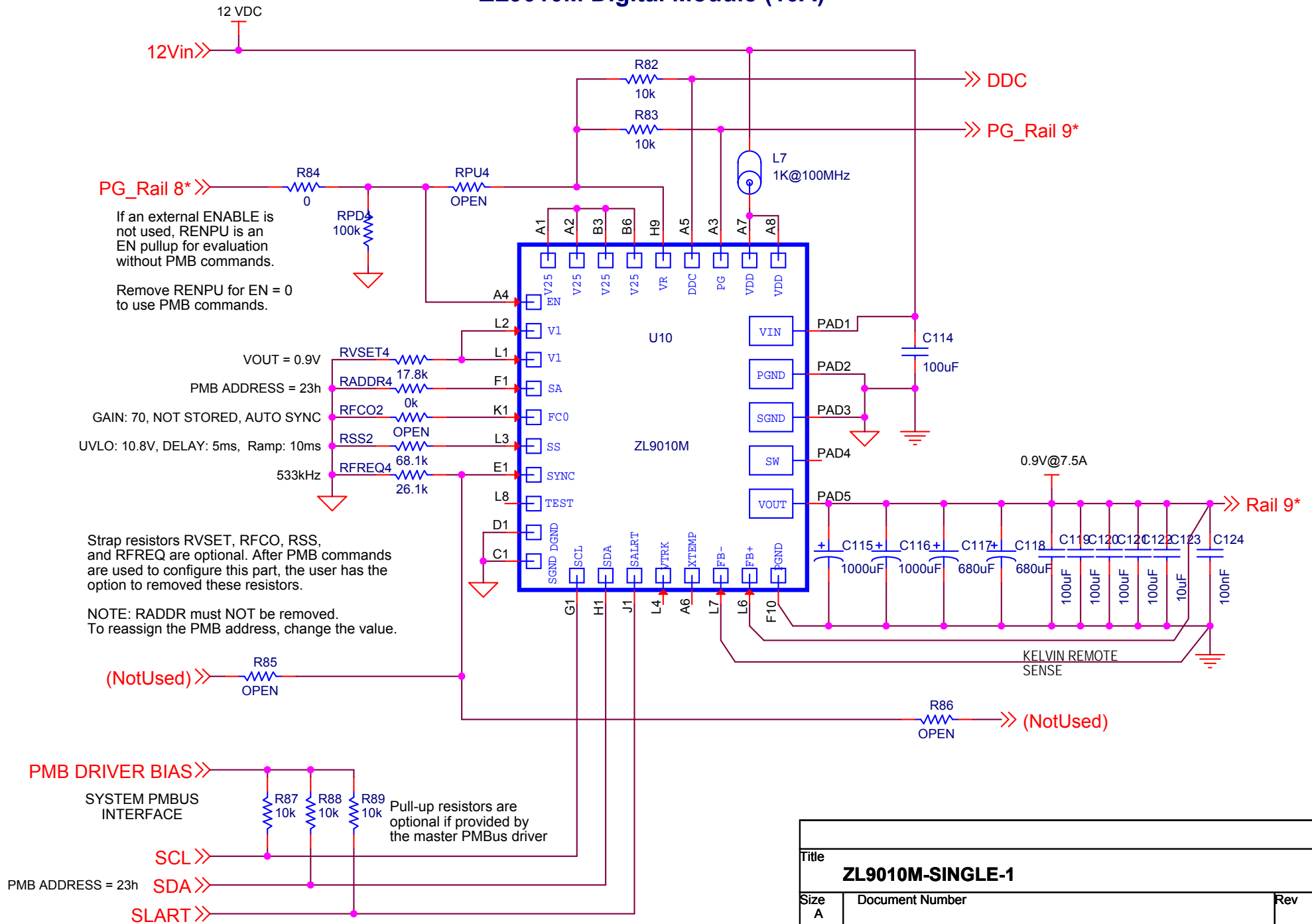
Title ISL85415-SINGLE-1			
Size A	Document Number		Rev
Date:	Thursday, March 09, 2017	Sheet 8 of 12	

ISL85415 SINGLE OUTPUT (500mA)



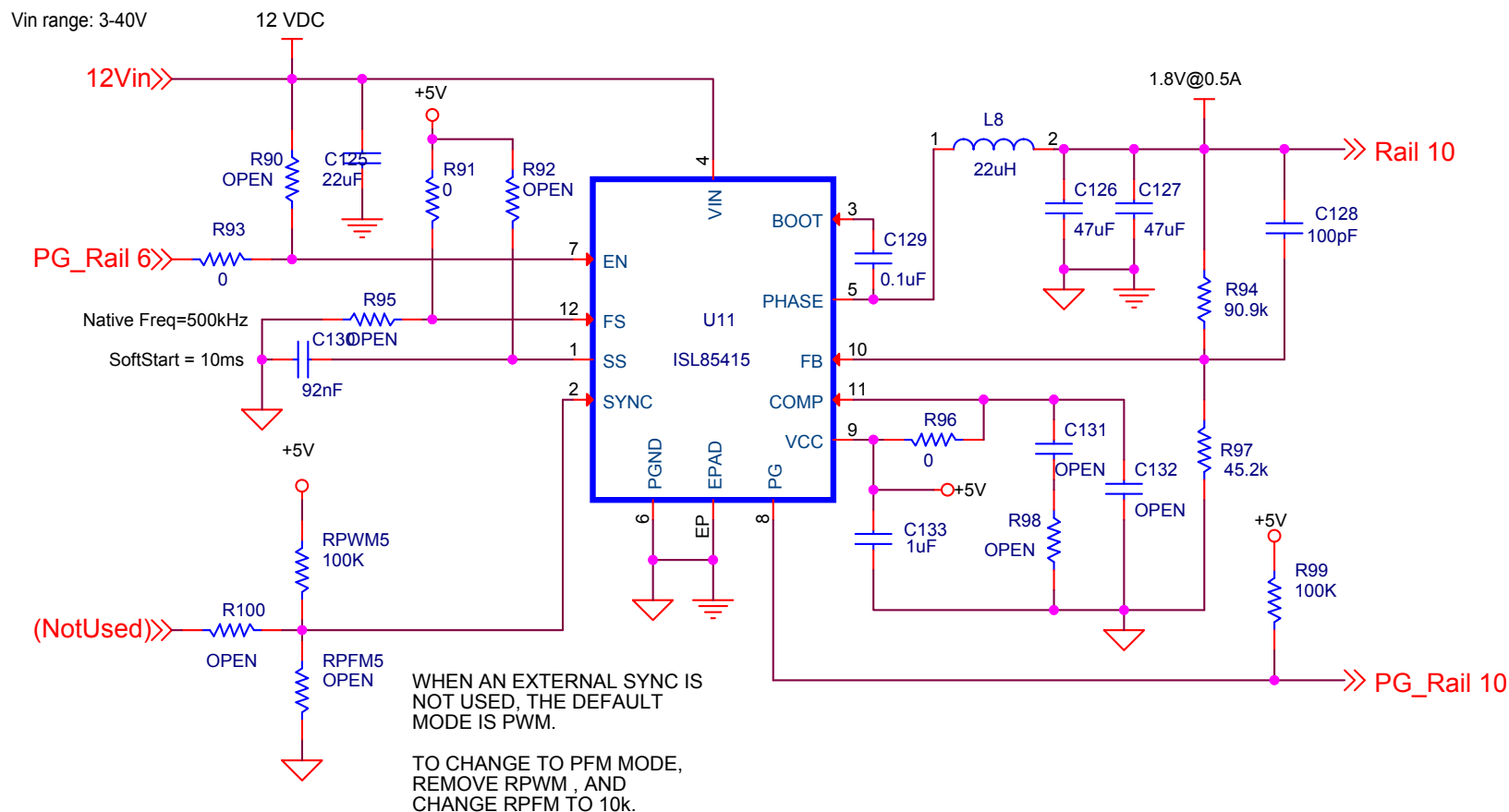
Title		
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Size A	Document Number	Rev
Date:	Thursday, March 09, 2017	Sheet 9 of 12

ZL9010M Digital Module (10A)



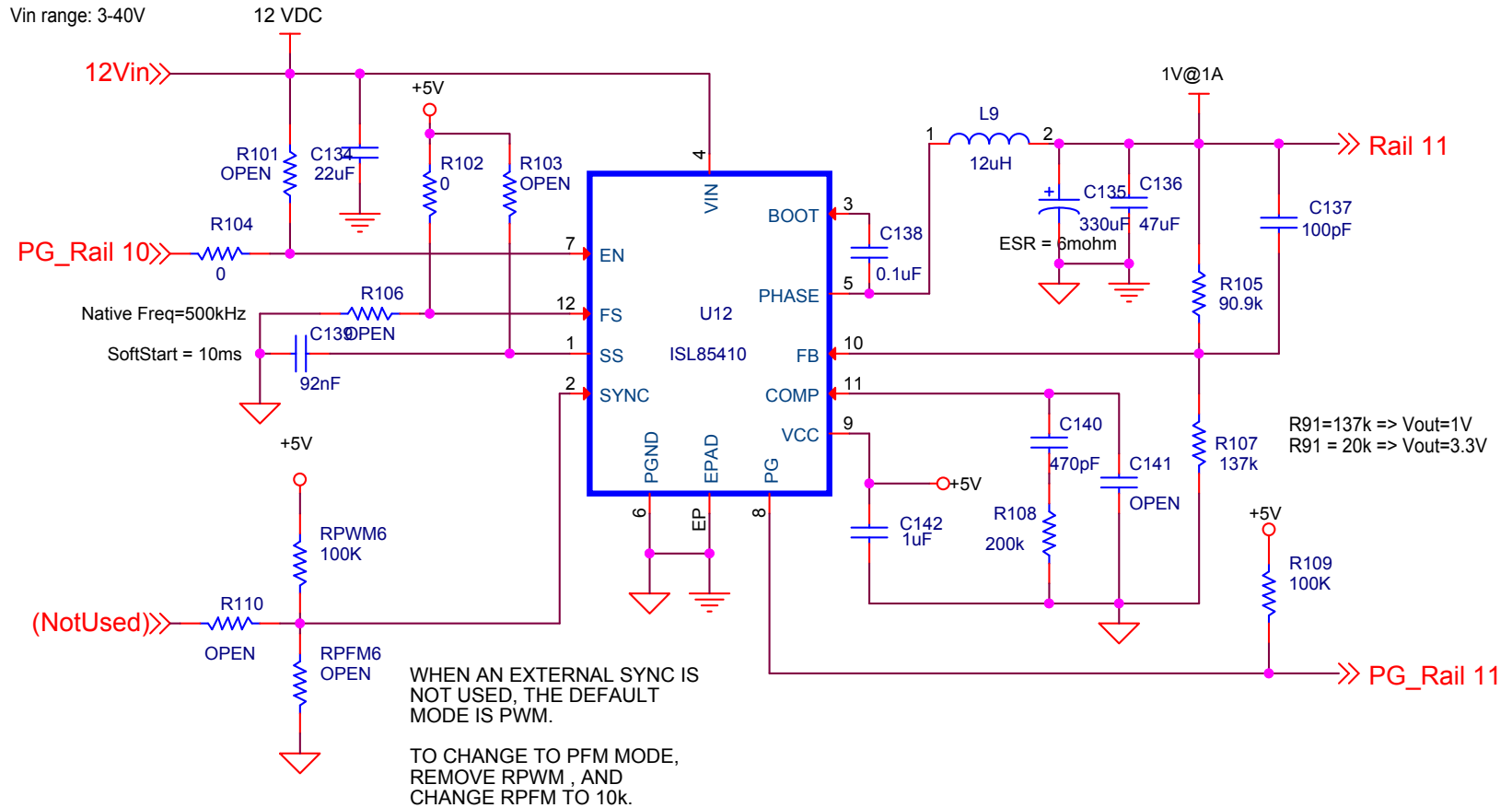
Title		
ZL9010M-SINGLE-1		
Size A	Document Number	Rev
Date:	Sheet 10 of 12	

ISL85415 SINGLE OUTPUT (500mA)



Title		
ISL85415-SINGLE-1		
Size A	Document Number	Rev
Date:	Thursday, March 09, 2017	Sheet 11 of 12

ISL85410 SINGLE OUTPUT (1A)



Title		
ISL85410-SINGLE-1		
Size A	Document Number	Rev
Date:	Tuesday, March 14, 2017	Sheet 12 of 12