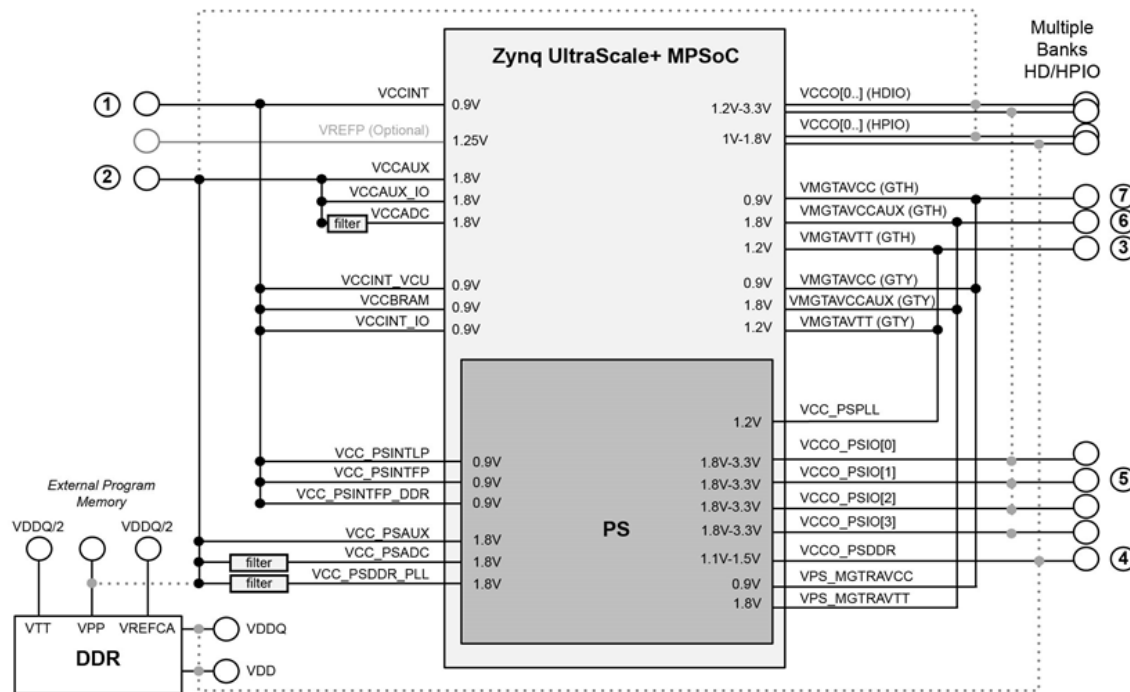


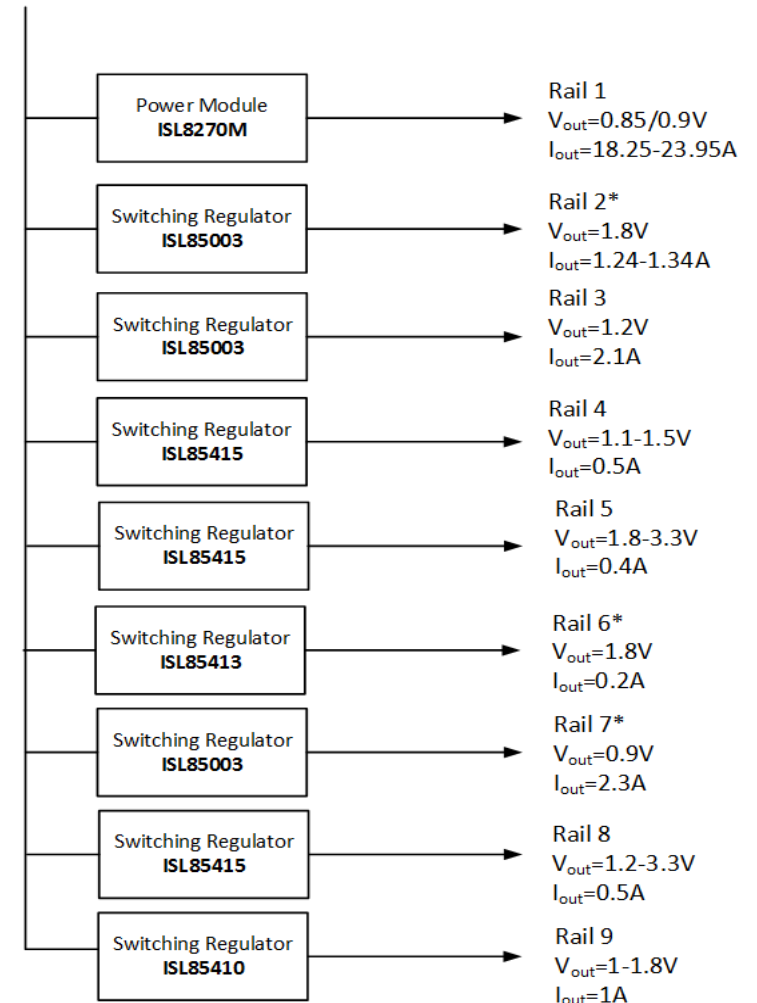
## USECASE 3 #3



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

12 V<sub>in</sub>

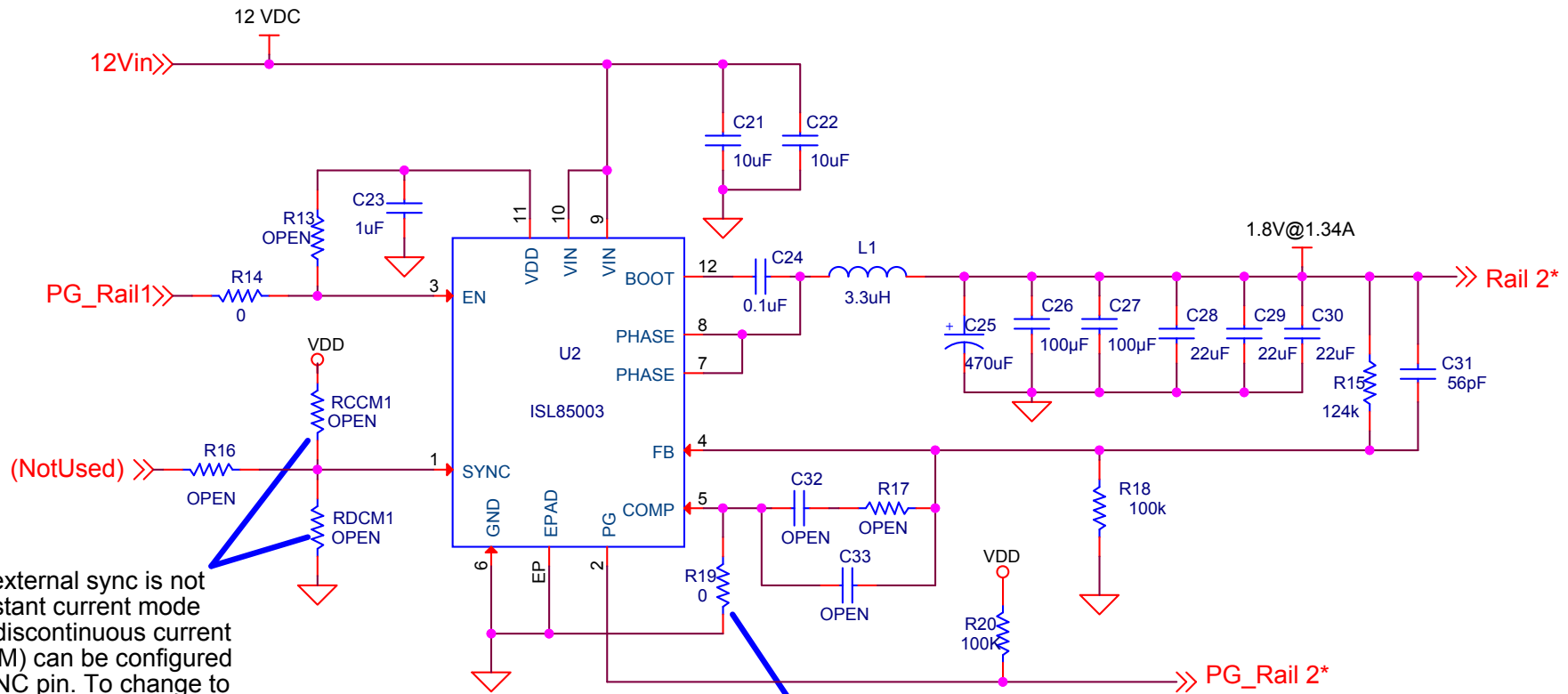


**intersil**

Title <b>ZYNQ US+ MPSoC Power Rails</b>		
Size <b>B</b>	Document Number <b>&lt;Doc&gt;</b>	Rev <b>A</b>
Date: <b>Thursday, March 09, 2017</b>	Sheet <b>1</b>	of <b>10</b>



# 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:	Tuesday, March 14, 2017	Sheet 3 of 10

12VDC

12Vin

VDD

C36 1uF

R21 OPEN

R22 0

Rail 7\*

EN 3

VDD 11

VIN 10

VIN 9

BOOT 12

C37 0.1uF

L2 2.2uH

1.2V@2.1A

PHASE 8

PHASE 7

U3 ISL85003

FB 4

SYNC 1

RCCM2 OPEN

R24 OPEN

RDCM2 OPEN

GND 6

EPAD 2

PG 5

COMP 5

C38 1000uF

C39 100uF

C40 100uF

C41 100uF

C42 22uF

C43 22uF

C44 22uF

R23 49.9k

C45 1uF

C46 0.1uF

C47 0.1uF

C48 56pF

R25 OPEN

C49 OPEN

R26 100k

R27 0

C50 OPEN

VDD

R28 100k

PG\_Rail 3\*

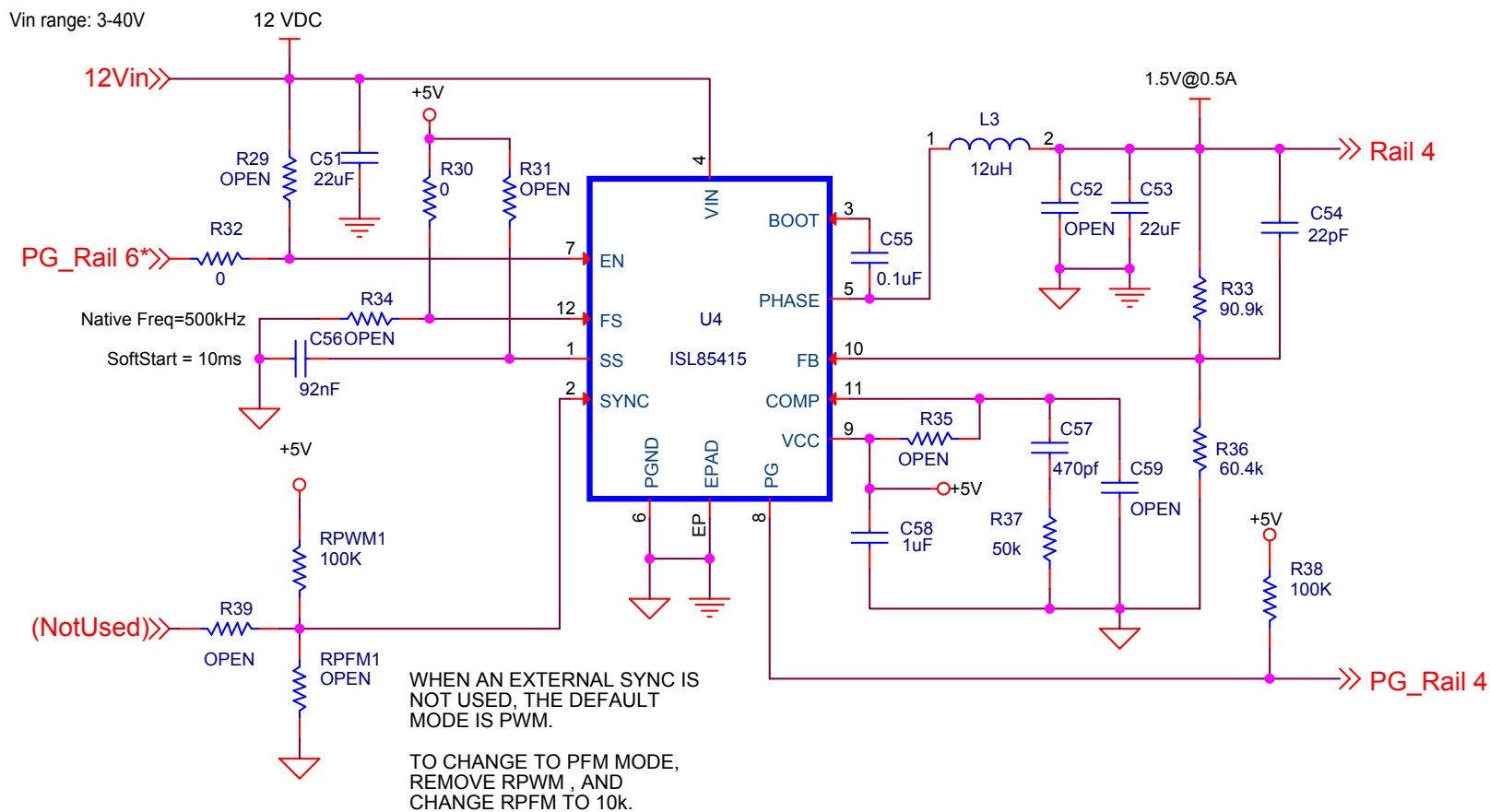
sync is not  
current mode  
continuous current  
be configured  
To change to

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

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

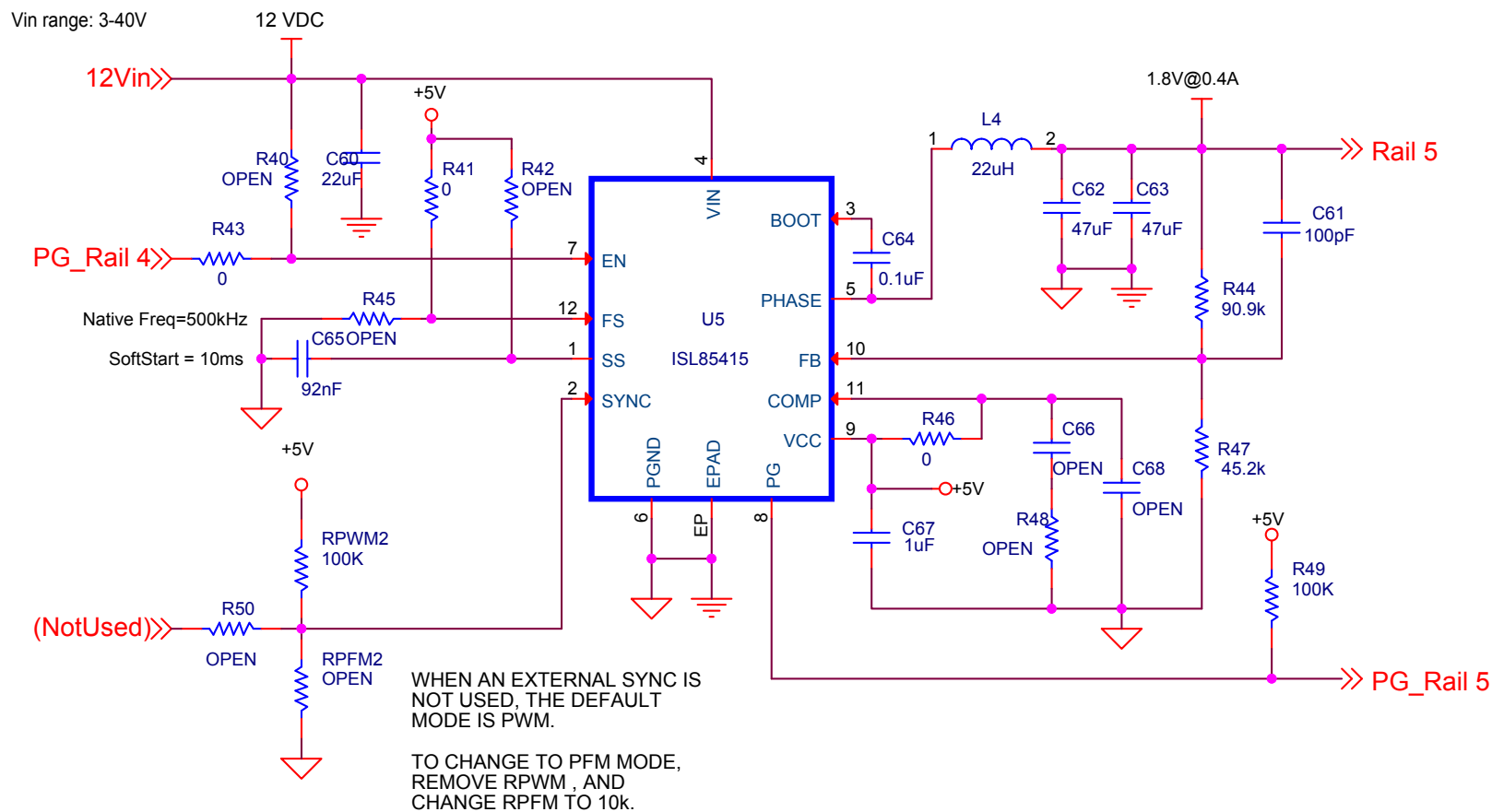
				A
Title ISL85003-SINGLE-1				
Size A	Document Number <Doc>			Rev <Rev Co
Date:	Tuesday, March 14, 2017	Sheet	4 of 10	

# ISL85415 SINGLE OUTPUT (500mA)



Title		
ISL85415-SINGLE-1		
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# ISL85415 SINGLE OUTPUT (500mA)



Title  
ISL85415-SINGLE-1

Size A Document Number

Rev

Date: Thursday, March 09, 2017

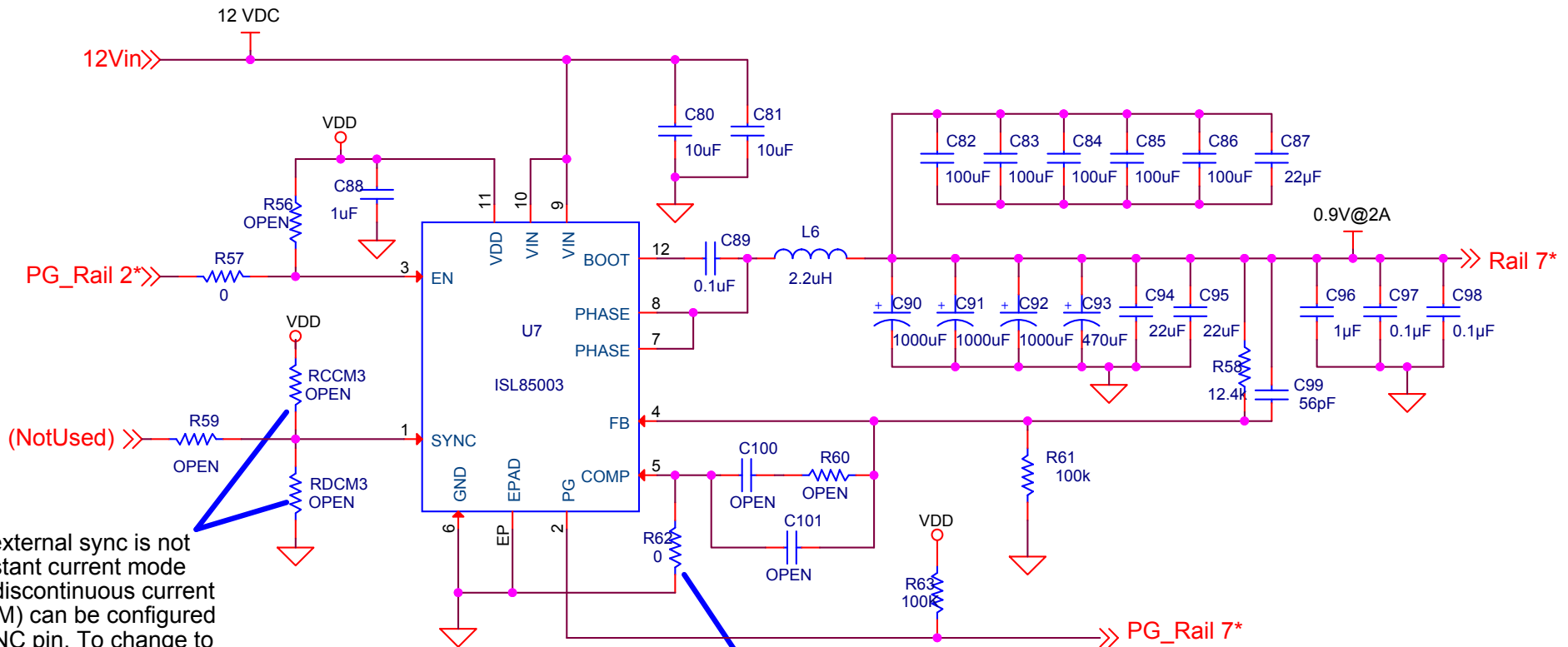
Sheet 6 of 10

5	4	3	2	1
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					Date:	Thursday, March 09, 2017	Sheet	7
5	4	3	2	1				

## 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)

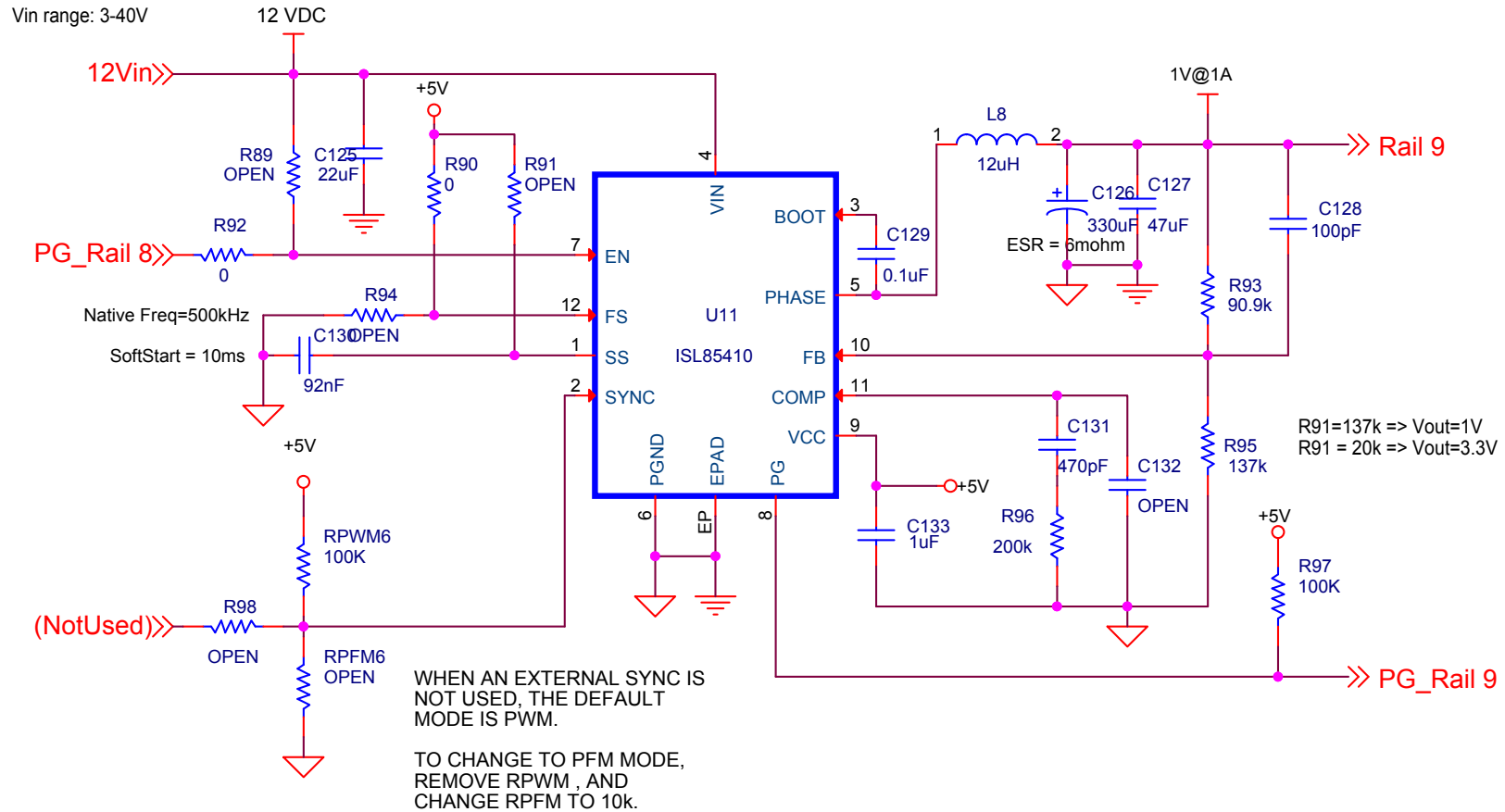
Title		
ISL85003-SINGLE-1		
Size	Document Number	Rev
A	<Doc>	<RevCo>
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Title ISL85415-SINGLE-1			
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# ISL85410 SINGLE OUTPUT (1A)



Title		
ISL85410-SINGLE-1		
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