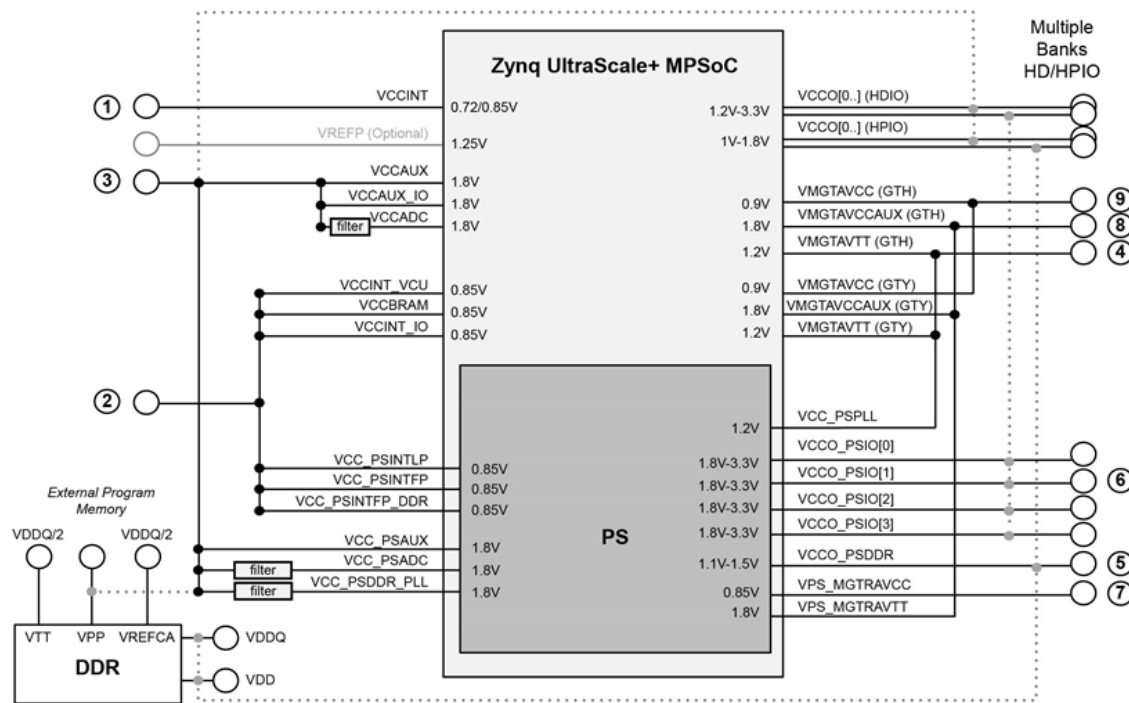


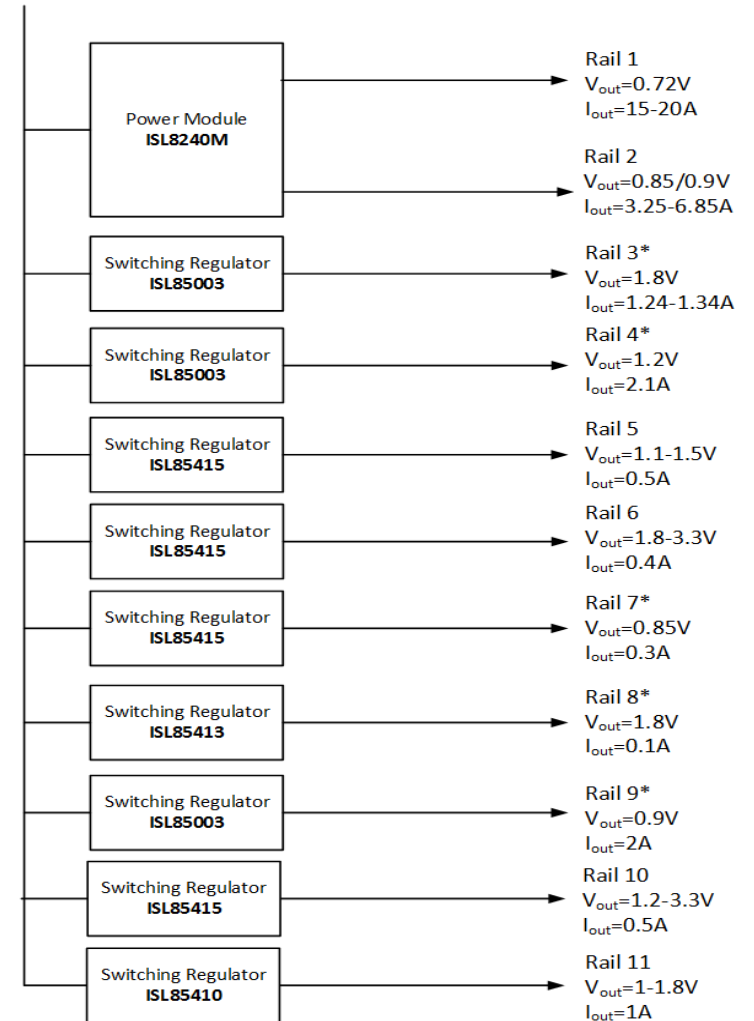
## USECASE 2 #3



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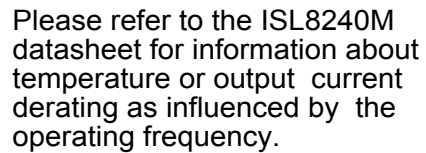
Rail	Voltage	Power Supply Rails
Rail 1	0.72/0.85V	VCCINT
Rail 2	0.85/0.9V	VCC_PSINTFP, VCC_PSINTLP, VCC_PSINTFP_DDR, VCCINT_VCU, VCCINT_IO, VCCBRAM
Rail 3*	1.8V*	VCC_PSAUX, VCCAUX, VCCAUX_IO, VCC_PSDDR_PLL, VCCADC, VCC_PSADC
Rail 4*	1.2V*	VMGTAVTT(GTH), VMGTAVTT(GTY), VCC_PSPLL
Rail 5	1.1-1.5V	VCCO_PSDDR
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

12 V<sub>in</sub>



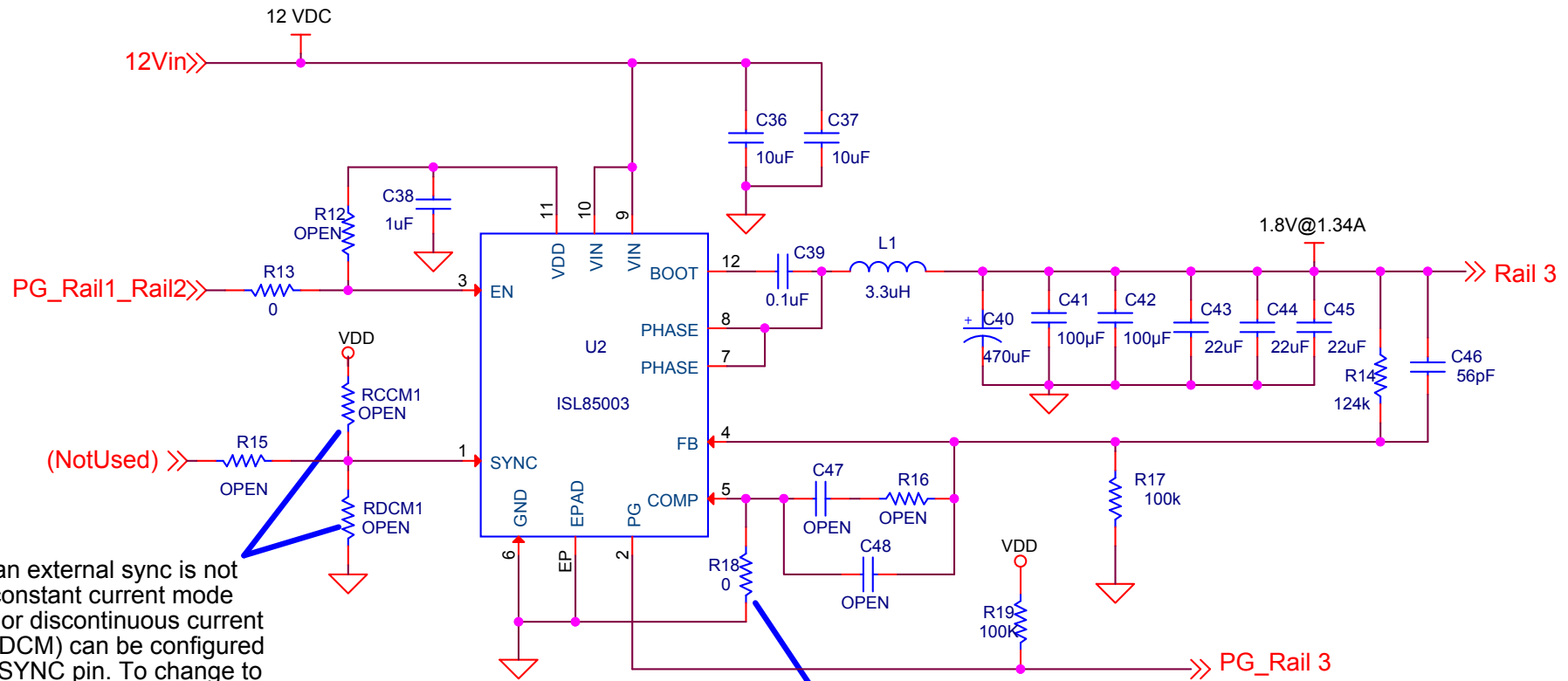
<b>intersil</b>		
Title	ZYNQ US+ MPSoC Power Rails	
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B	<Doc>	A
Date:	Thursday, March 09, 2017	Sheet 1 of 11

VIN RANGE:  
4.5V to 20V



Title			
ISL8240M-dual-1			
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## 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		
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Date:	Thursday, March 09, 2017	Sheet 3 of 11

12VDC

12Vin

VDD

C49 10uF

C50 10uF

C51 1uF

R20 OPEN

R21 0

Rail 9

EN

VDD

VIN

VIN

BOOT

12

C52 0.1uF

L2 2.2uH

1.2V@2.1A

PHASE

PHASE

7

C53 1000uF

C54 100uF

C55 100uF

C56 100uF

C57 22uF

C58 22uF

C59 22uF

R22 49.9k

C60 1uF

C61 0.1uF

C62 0.1uF

U3 ISL85003

FB

4

5

C64 OPEN

R24 OPEN

C65 OPEN

R25 100k

R26 0

VDD

R27 100k

PG\_Rail 4\*

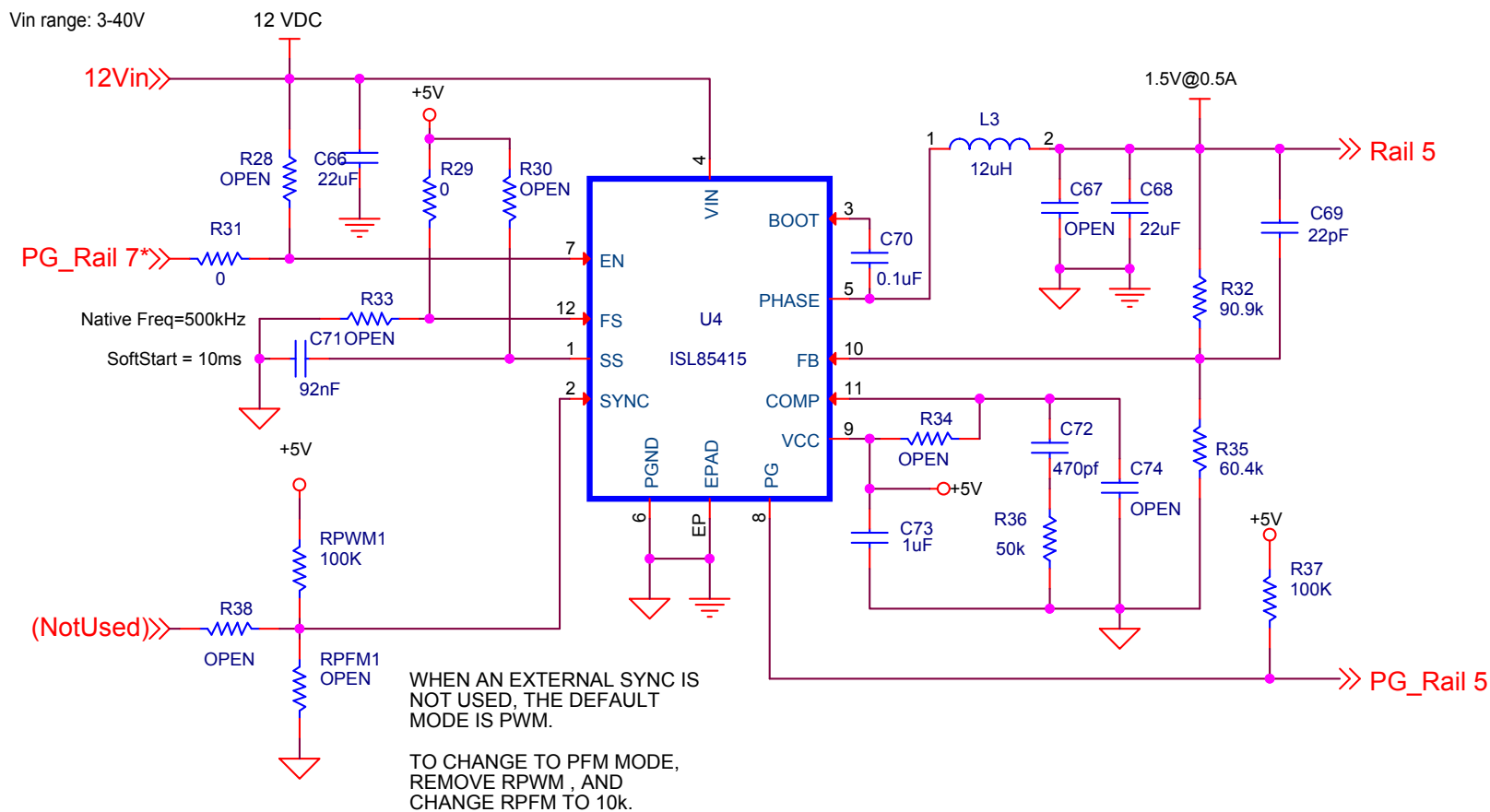
sync is not  
current mode  
continuous current  
mode should be configured  
To change to

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)

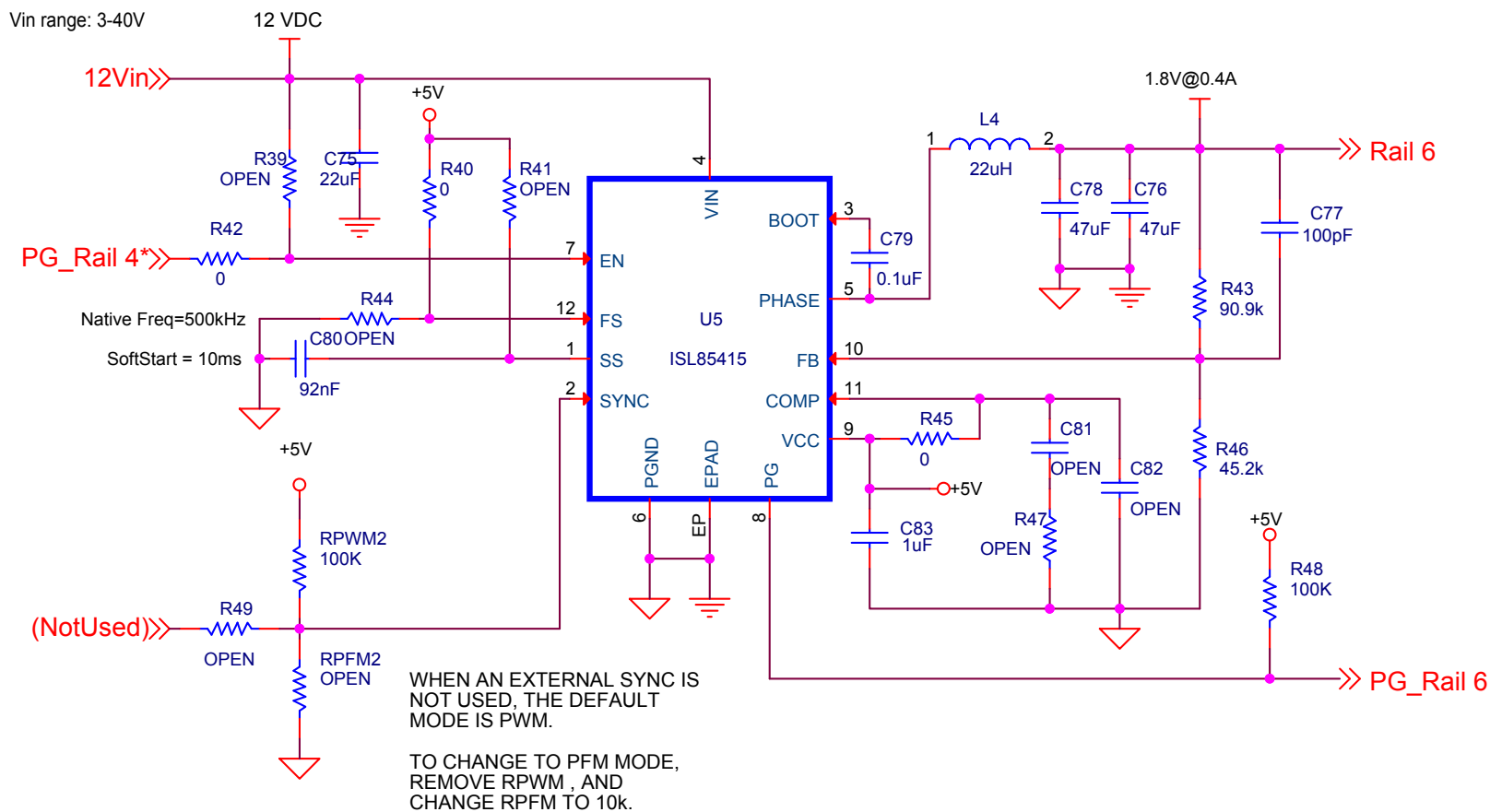
Title					A
ISL85003-SINGLE-1					
Size	Document Number			Rev	C
A	<Doc>			<RevC>	
Date:	Thursday, March 09, 2017		Sheet	4	of 11

# ISL85415 SINGLE OUTPUT (500mA)



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



Title  
ISL85415-SINGLE-1

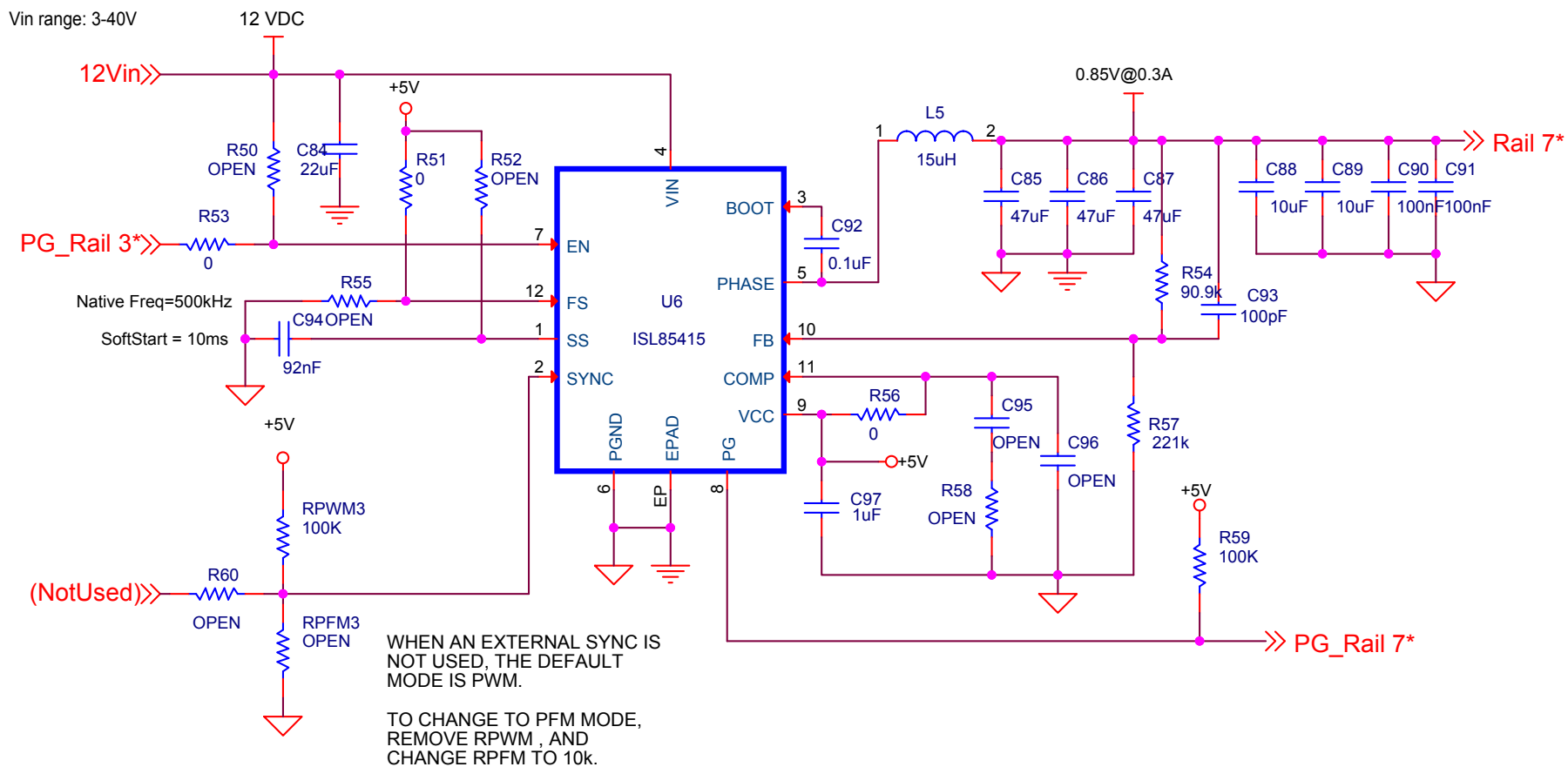
Size  
A Document Number

Rev

Date: Thursday, March 09, 2017

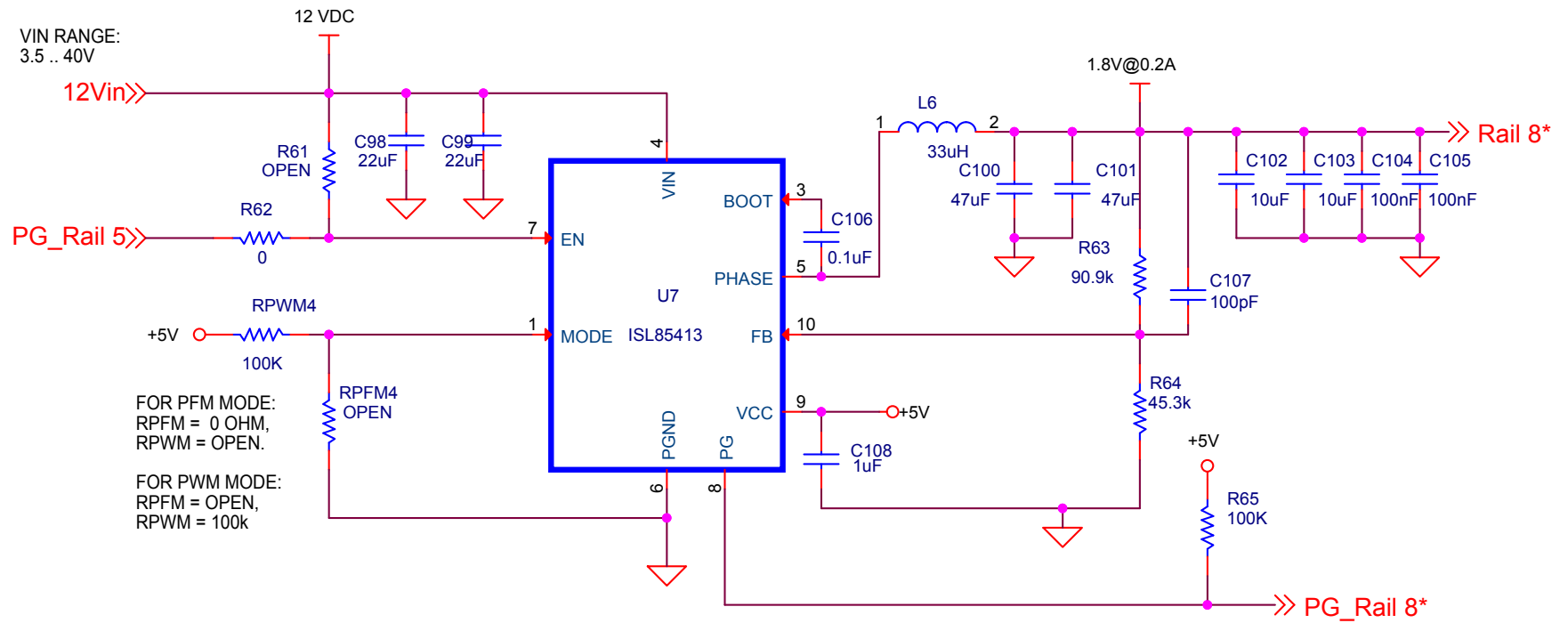
Sheet 6 of 11

# ISL85415 SINGLE OUTPUT (500mA)



Title		
ISL85415-SINGLE-1		
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A		
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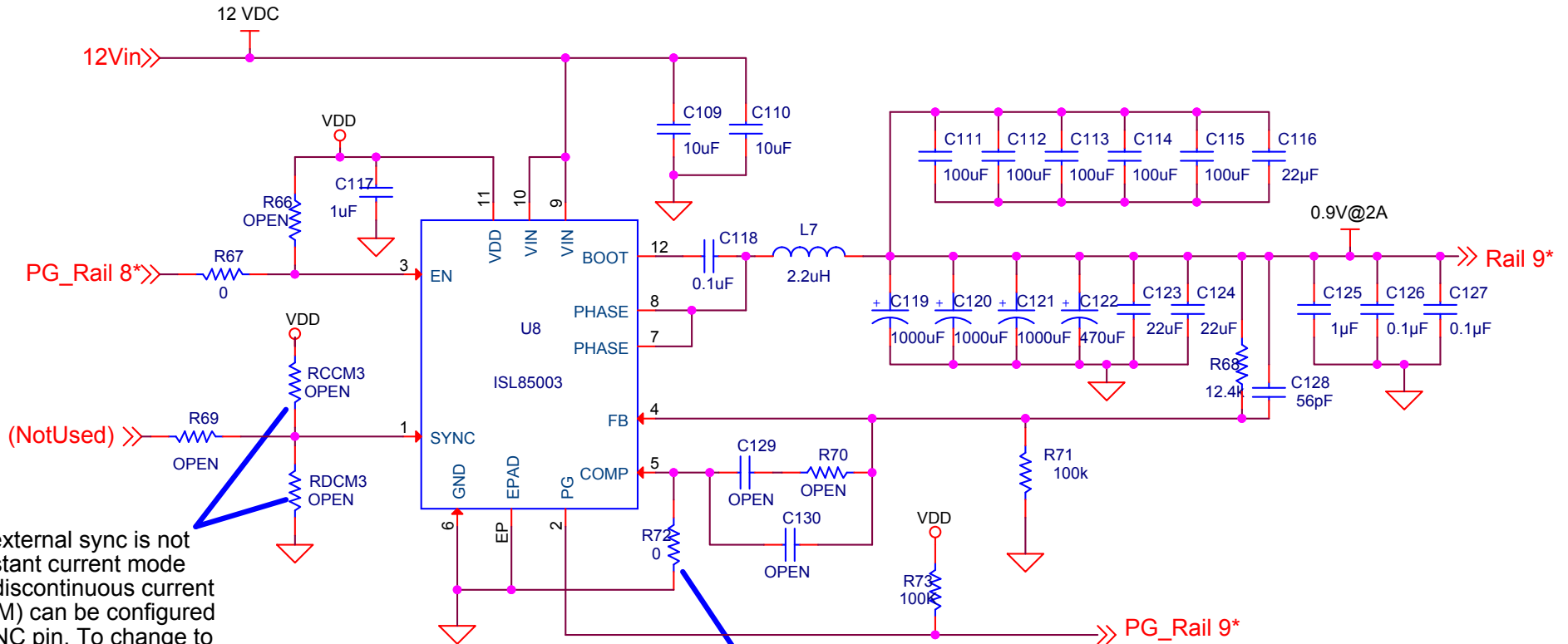
# ISL85413 SINGLE OUTPUT (300mA)



Title		
ISL85413-SINGLE-1		
Size	Document Number	Rev
A	<Doc>	
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## 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.

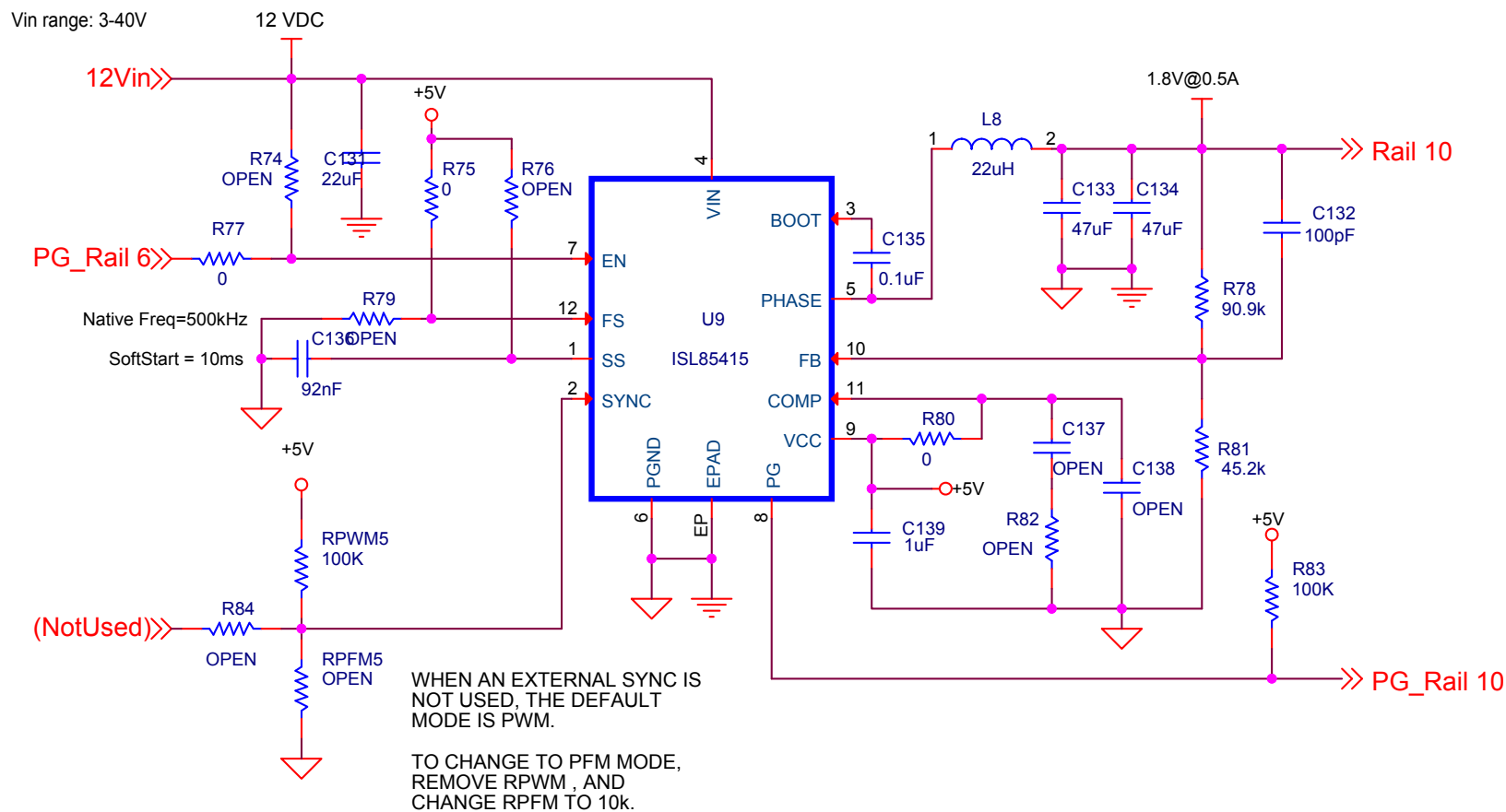
If custom compensation is desired, remove the ground connection on the COMP pin to enable external compensation.

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)

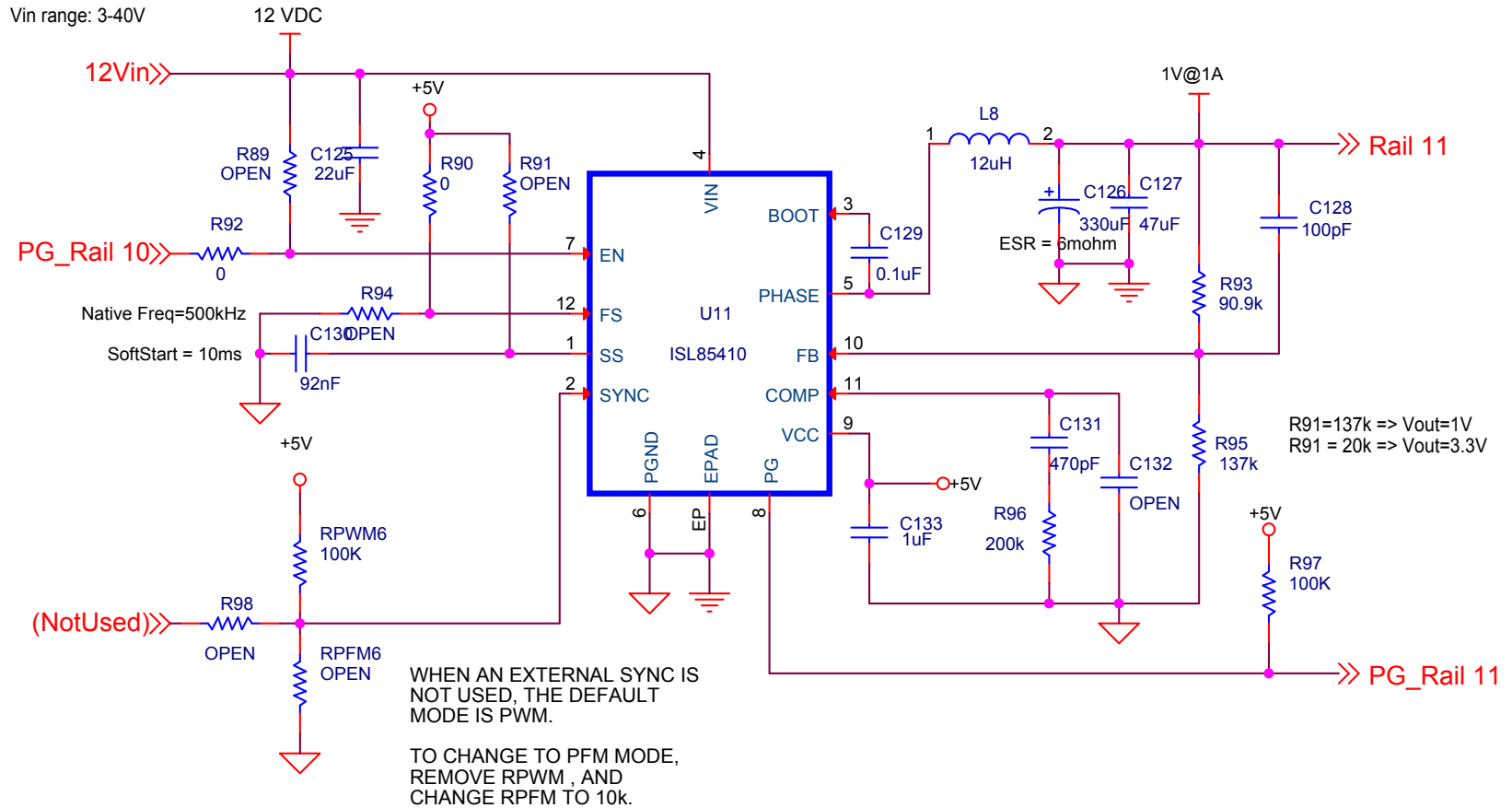
Title		
ISL85003-SINGLE-1		
Size	Document Number	Rev
A	<Doc>	<RevCo
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# ISL85415 SINGLE OUTPUT (500mA)



Title		
ISL85415-SINGLE-1		
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# ISL85410 SINGLE OUTPUT (1A)



Title		
ISL85410-SINGLE-1		
Size	Document Number	Rev
A		
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	2	1