

PWM Clock Phase 4
to HV Converter

"PWM Clock"

J1
70553-0002
Molex C-Grid SL 3

PwrCom

BkpFrameGnd

3V3+

D1
ZLLS1000TA

D2
ZLLS1000TA

Bias3V3+

4C2,4C3,4C4

R1
120
5%

3V3+
5
4
3
2
1
PwrCom

SN74LVC1G04DBVR
U1

J2

1A Bkp3.15+
1B Bkp3.15Com

2A Sck

2B MOSI

3A MISO

3B nSlotSel

4A Sel0

4B ResOut

5A IRQ

5B BkpFrameGnd

6A

6B

7A

7B

8A BkpPwr3.3+

8B BkpLVCom

9A BkpPwr5+

9B BkpLVCom

10A BkpPwr12+

10B BkpHVCom

11A BkpPwr12+

11B BkpHVCom

12A BkpPwr24+

12B BkpHVCom

13A BkpPwr24+

13B BkpHVCom

14A BkpBatt+

14B BkpHVCom

15A BkpBatt+

15B BkpHVCom

16A BkpBatt+

16B BkpHVCom

not used

3V3+

1D4

5V+

1D3

12V+

1D2

L1
30Ohm@100MHz

C2
0.10uF
100V

C4
0.10uF
100V

C3
22uF
50V

PwrCom

U2

V+

Set

Mod

Div

Ph

Gnd

LTC6902

Out1

Out2

Out3

Out4

4

5

6

7

Phase1

Phase2

Phase3

to 12 V Converter

to 5 V Converter

to 3.3V Converter

4C2

4C3

4C4

Master Clock
500 kHz +/- 3%

Oscillator Initial Settings

R4 = 133k Fosc = 1500 kHz (output 500 kHz) +/- 3%

R3 = open, R8 = 100k Modulation disabled

R2 = open, R7 = 100k Divisor = 1

R5 = 100k, R6 = 100k Phase = 3

Input Power
to Converters

V Batt+ 5D2,5D3,5D4

PwrCom 1C2,1C3,1C4,5C2,5C3,5C4

+3.3V_LC
LVCom
+5.0V_LC
12.0V_LC

J3
2-1445098-4
MicroMNL 4

"Boost/Ext Pwr"

R9
2.2K
5%

R10
560
5%

R11
240
5%

D3

D4

D5
LTST-C190GKT

1

2

1

2

1

2

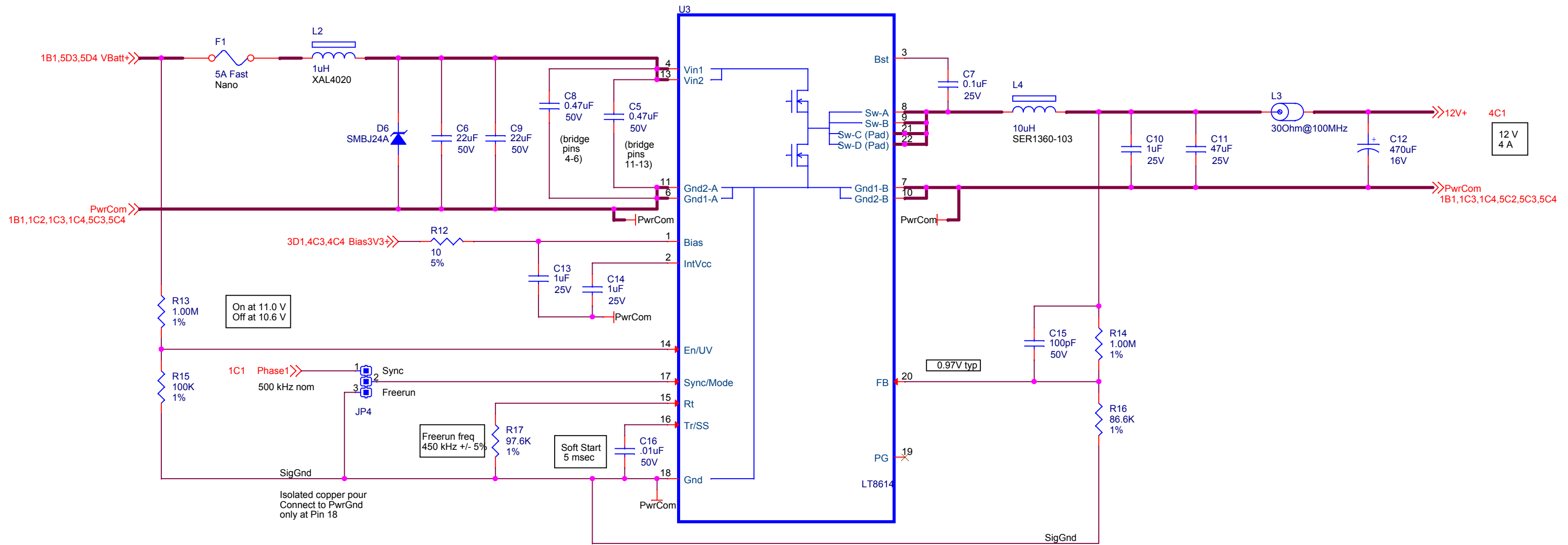
PwrCom

"Remove
Before Dive"

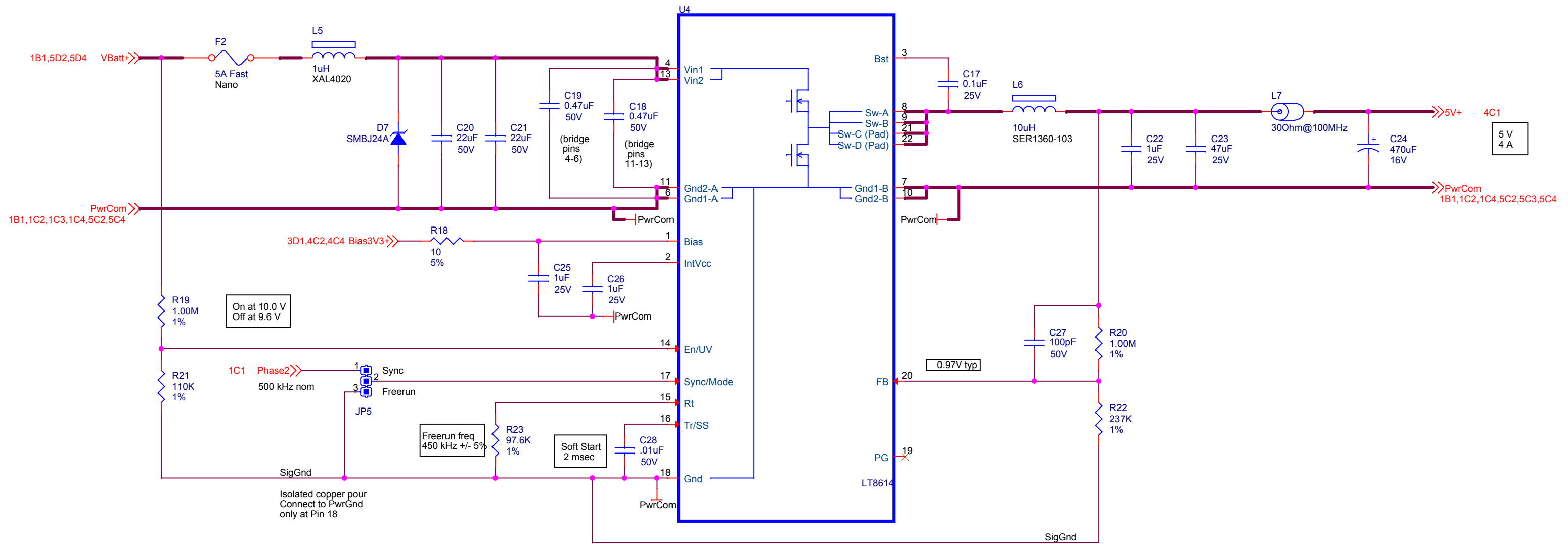


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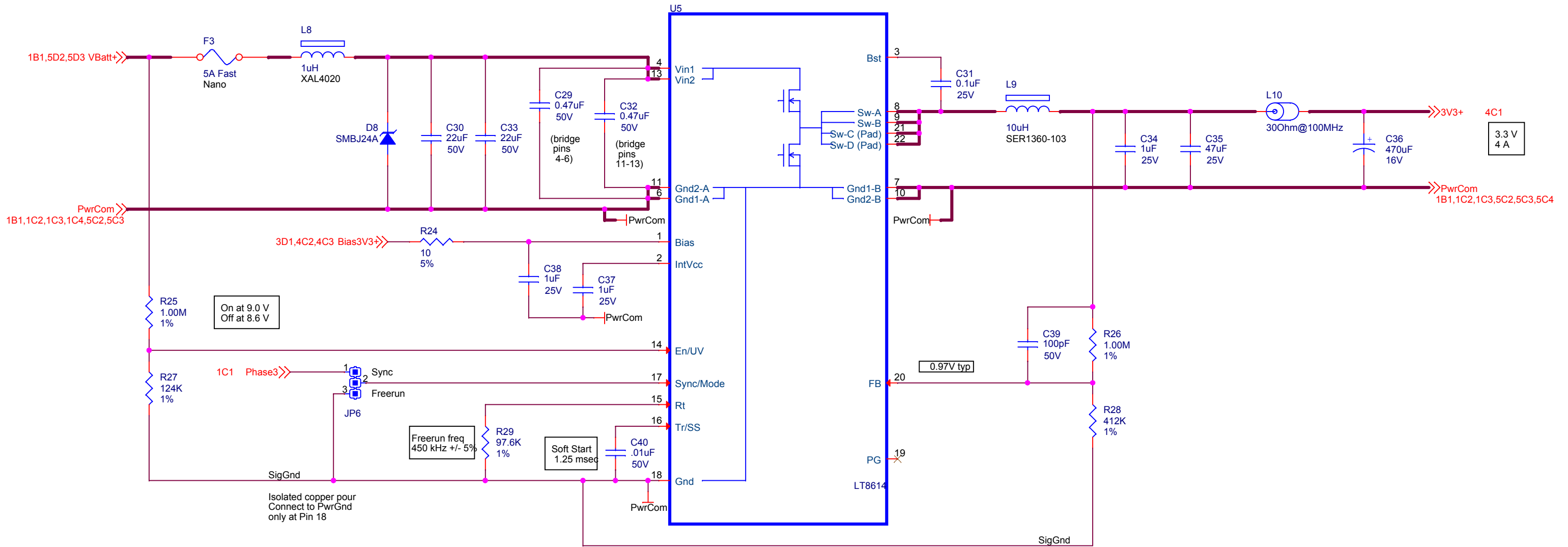
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Title 12V Converter, LV Converter Board, Load Control System, LRAUV		Document Number 11021189	Rev <Rev>
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Title 5 V Converter, LV Converter Board, Load Control System, LRAUV		Document Number 11021173	Rev <Rev>	
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Title 3.3 V Converter, LV Converter Board, Load Control System, LRAUV		Document Number 11021173	Rev <Rev>
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