P1

N E L

[R1]

L-fb 3V3 N-fb RLY-en 5V0

Caution!
High Voltage

PFC-N

Caution!
High Voltage

H1

M3

M1

JP1
GND
SW1
Ext

Vin
Vout
5V0
3V3

C5 C6 U1 LD1
C2
C7 [R1] C4

J2

[R2] M5

J1
GND
GND
DAC-2
DAC-1
R12 R11 U3
C4 C1 Cd3

PFC
Bridgeless

[R4]

Isolated Aux output

GNDs

+5V

+12V / +15V

400V in max

M2
GNDp
GNDp
NC
Vin

J8

GND
BS6

PCF-Out
BS5

AC0-L
M1
AC0-N
GND

RT1
RLY1

L2
ACin-N
ACin-L
M4
L1

HS1
Q1

HS2
Q2

PFC-Out
JPR1

C6 C5
C16
C4

D5 D4

PFC-Bridgeless
[R1]

C2000 – Piccolo ™
Texas Instruments

Net-Checked

C2000 – Piccolo™
Texas Instruments

**PFC
Bridgeless
[R4]**

P1

N E L

T1

F1

L1

ACi-L

ACi-N

VAR1 C1

Earth

T1

C2

C3

C5   C6

C4

L2

ACo-L

ACo-N

RT1

RLY1

GND

M1

Caution! High Voltage

R4 R1

R5 C8 C7 R2

R6 D2 D1 R3

R8 Q1 D3

L-fb 3V3 N-fb RLY-en 5V0

[R1]

R10 R2 R1 ZD2
ZD1 R1 ZD2

R4 Cd1 R3 R6 C2

D1 U1 R5 D2

R9 Cd2 U2

R8 R7

Caution!
High Voltage

PFC-N

H1

C3

M3

JP1 SW1 Ext R1

GND

C1

Vin

Vout

5V0

3V3

M1
1
2
3
4
5

J3

J4

J5

C5 C6 U1

C7 C2 R2

C3 LD1

C4

[R1]

JP1 U4 J2 R11 LD1 3V3 J6

C1 C3

TDI
TRSTn
TCK
TMS
TDO

C13 U5 C15

RX
TX

J4

DA1 L1 C5 C12 U1

R5
X1

C14 U6 C16

C6 C4 C7

C9 C8 R1 C10

Bt1
Bt2
GP1 GP2 J1 J3

U3

C17

R7 R6 J5 R4 R3 R2 R8

R13 U2 R14

R9

[R2] M5

GND
GND
DAC-2
DAC-1

J1

R12 R11 U3
C4 C1 Cd3

1B J7
2A

GP

PWM-1 R2 R1
PWM-2 R4 R3

12V0 Cd5 ZD1

C2 C1

R6 R16 U1

R10 TP2

D3 C3 R9 R5

R18 D6 R17 C7

Cd3 G1 G2

Ifb-2

R19

L2 L1

ACin-N ACin-L

M4

HS1

R7

Q1
G S
G
D

T2
4 3 6 1

Q2
D
S G 1

HS2
4 3 6 1

T1

Cd2 R8 C1
R16 D1 R12

Vfb

Ifb-1

R11

R15 R14 R13

C9

C16

C4

C6

C5

D5 D4

PFC-Out
PR1

PFC-Bridgeless
[R1]

GND
BS6

PCF-Out
BS5

GNDs

Isolated Aux output

400V in max

GNDp

GNDp

NC

Vin

M2

J8

+5V

+12V / +15V