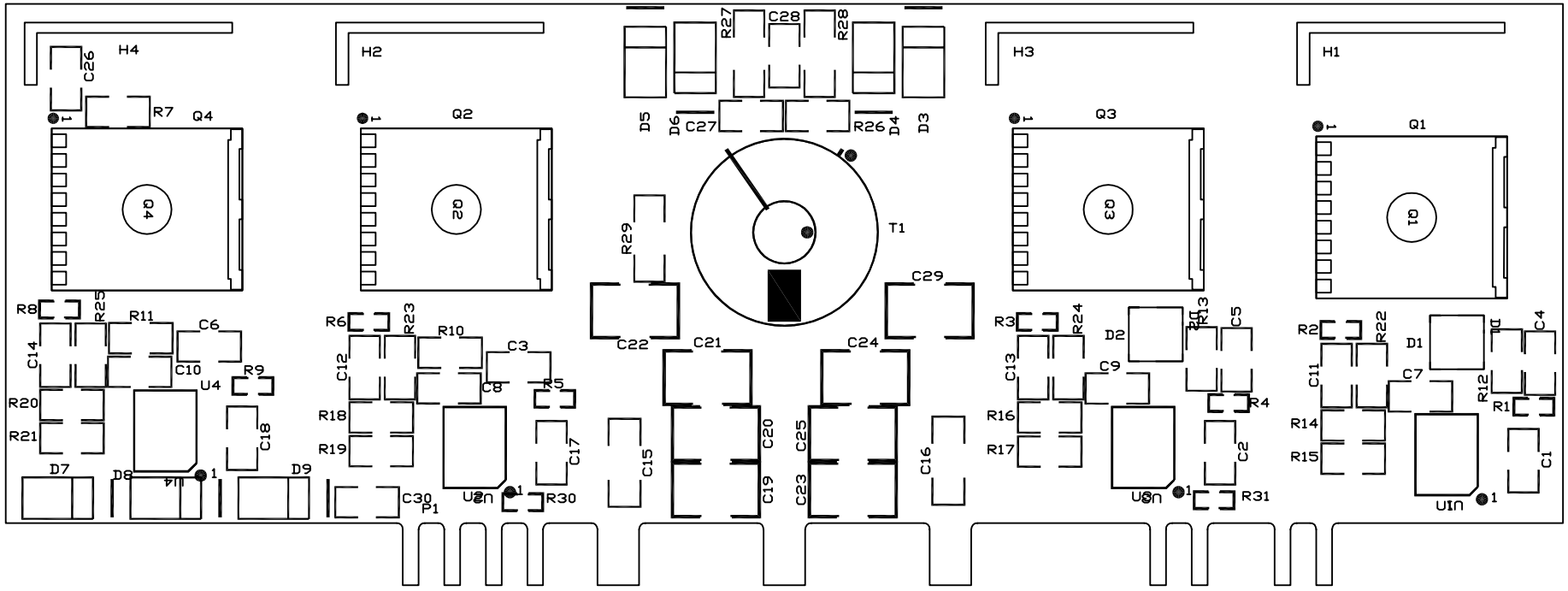
EGaN TOLL board Component Reference guide

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	eGaN TOLL BOARD	09/06/2016	MARK STEM



UNLESS OTHERVISE SPECIFIED	SIGNATURES	DATE
DIMENSIONS ARE IN INCHES	NAME	DATE
TOLERANCES ON:		
2 PL DECIMALS +/- .010		
3 PL DECIMALS +/- .005		
MILS +/- 5 MILS		
HOLES +/- 3 MILS		
ANGLES +-		
FRACTIONS +-		

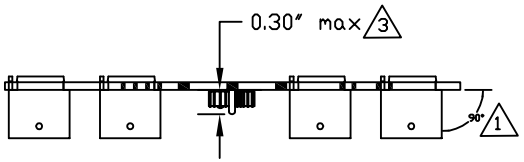
INFINEON TECHNOLOGIES
101 N. Sepulveda BLVD, El Segundo, CA 90245

TITLE: eGaN TOLL BOARD ASSEMBLY

SIZE	DWG NO	REV
	PCB = P100015	

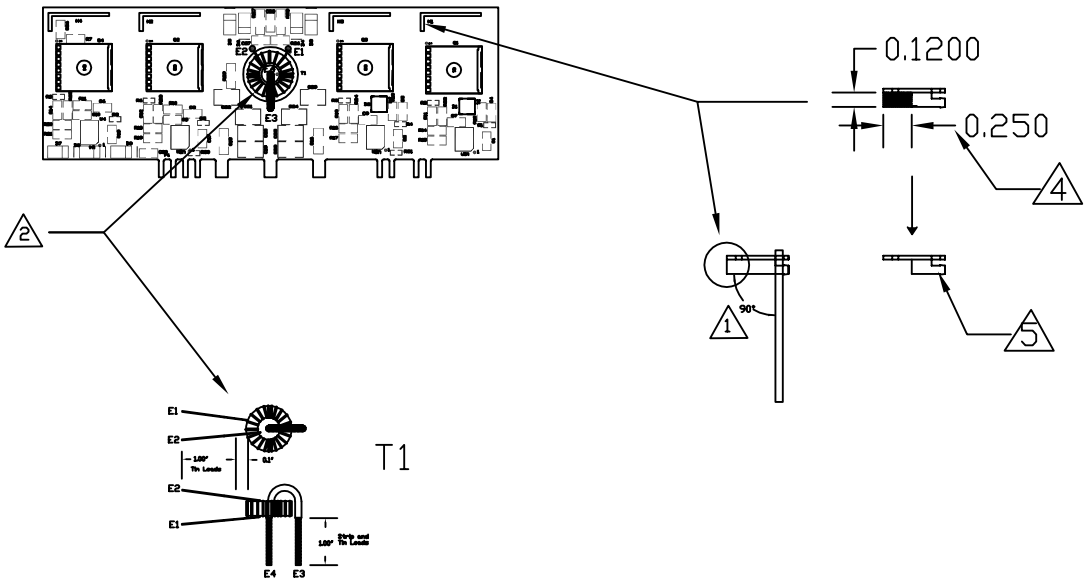
SCALE		SHEET
		1

For EGaN board #1 Assembly



Notes:

1. Heat sinks H1, H2, H3, and H4 should be soldered flush to PCB at a 90 degree angle to board as shown.
2. Follow exploded view of current transformer T1 for correct phasing installation of leads.
3. Solder current transformer T1 to PCB while making sure maximum height is below 0.30" above PCB.
4. Trim H1 as shown to fit over L1 on Main board.
(for EGaN board #1 only)
5. Heat sink H1 should look as shown.

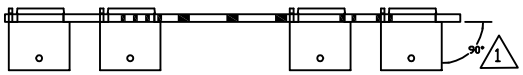


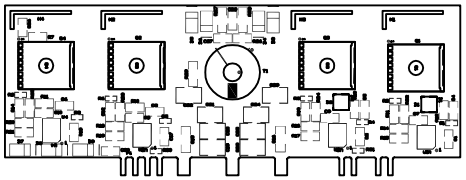
INFINEON TECHNOLOGIES 101 N. Sepulveda BLVD, El Segundo, CA 90245		
TITLE: eGaN TOLL BOARD ASSEMBLY		
SIZE	DWG NO: PCB = P100015	REV
SCALE		SHEET: 2

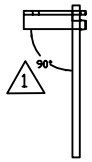
For EGaN board #2 Assembly

Notes:

1. Heat sinks H1, H2, H3, and H4 should be soldered flush to PCB at a 90 degree angle to board as shown.







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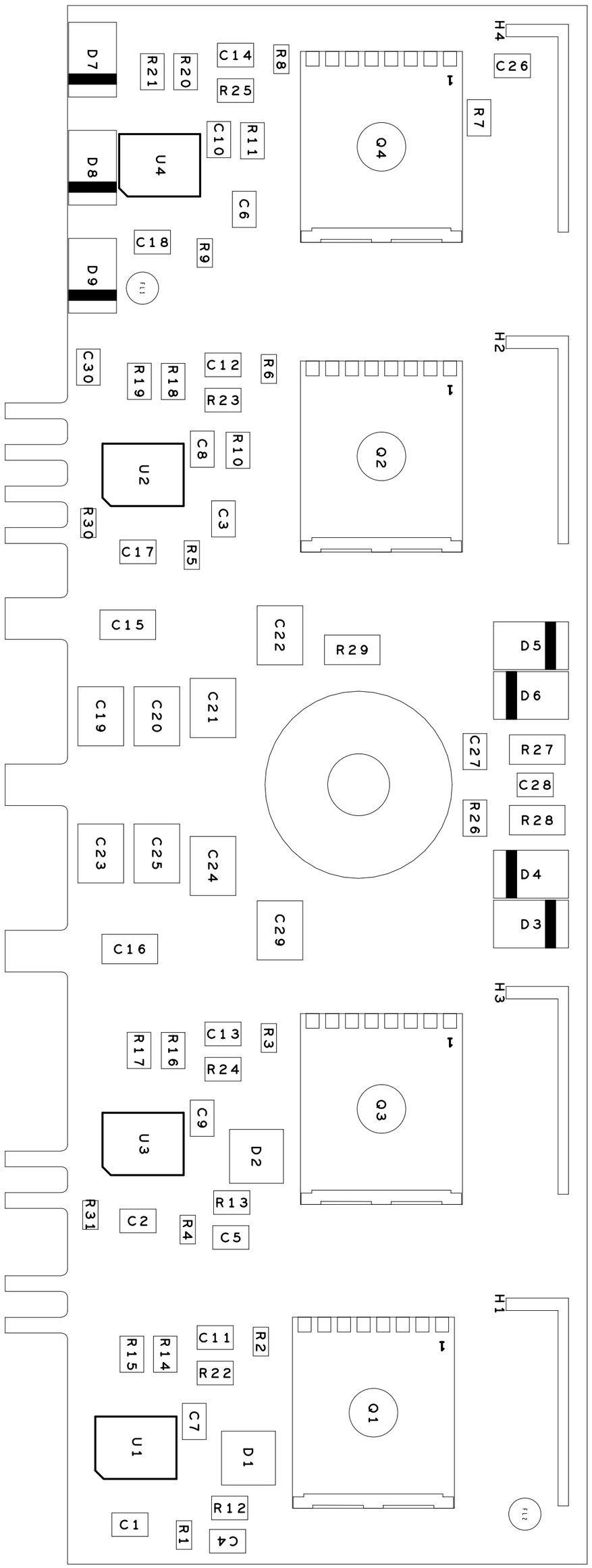
TITLE: eGaN TOLL BOARD ASSEMBLY		
SIZE	DWG NO: PCB = P100015	REV
SCALE		SHEET: 3

Assembly_Top



Assembly_Top

H4
H2
H3
H1
FL2

C26 1000pF
R7 10K NTC

D5 2A
D6 2A
R27 2
C28 0.01uF
R28 18.2
D4 2A
D3 2A

C27 470pF
R26 100

Q4 IGT60R070G1
Q2 IGT60R070G1
Q3 IGT60R070G1
Q1 IGT60R070G1

R29 1
XFMR Torroid

C22 4700pF
C29 4700pF

R8 10K
C14 0.01uF
R25 1k
R11 20
C10 1uF
C6 0.1uF
R20 4.7
R21 4.7
U4 1EDI20N12AF
R9 10K
C18 1uF
FL1
D7 2A
D8 2A
D9 2A

R6 10K
C12 0.01uF
R23 1k
R10 20
C8 1uF
C3 0.1uF
R18 4.7
R19 4.7
C30 1uF
U2 1EDI20N12AF
R5 10K
C17 1uF
R30 100

C15 0.033uF
C21 4700pF
C20 4700pF
C19 4700pF
C24 4700pF
C25 4700pF
C23 4700pF
C16 0.033uF

R3 10K
C13 0.01uF
R24 1k
C9 1uF
R16 4.7
R17 4.7
C3D1P7060Q D2
U3 1EDI20N12AF
R13 20
C5 0.1uF
R4 10K
C2 1uF
R31 100

R2 10K
C11 0.01uF
R22 1k
C7 1uF
R14 4.7
R15 4.7
C3D1P7060Q D1
U1 1EDI20N12AF
R12 20
C4 0.1uF
R1 10K
C1 1uF

FL3

R32

C32

C31

FL4

Assembly_Bottom

FL3

C32
470pF

C31
470pF

R32
3

FL4

Assembly_Bottom