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TMF8801 Daughter Card

Title		TMF8801 Daughter Card	
Size	Number	Revision	
A	DC-TMF8801-01	B	
Date:	20.03.2019	Sheet 1	3 of
File:	\\..\Title Page.SchDoc	Drawn By:	J.Dolic

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TMF8801 Daughter Card

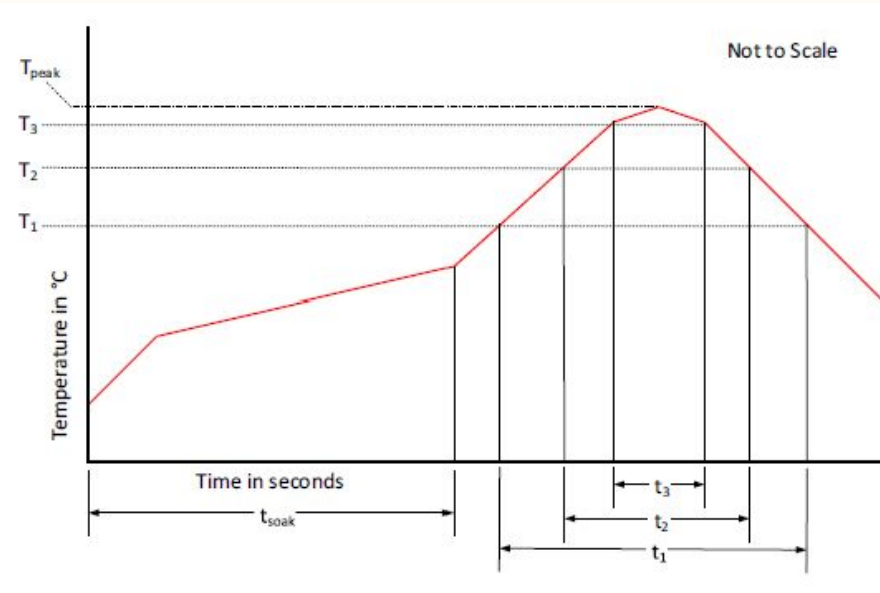
Table of Contents

- Sheet 1: Title Page
- Sheet 2: Project Page (This page)
- Sheet 3: Schematics

Revision History

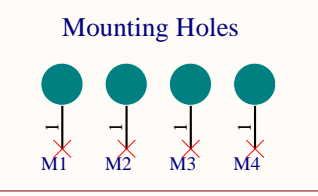
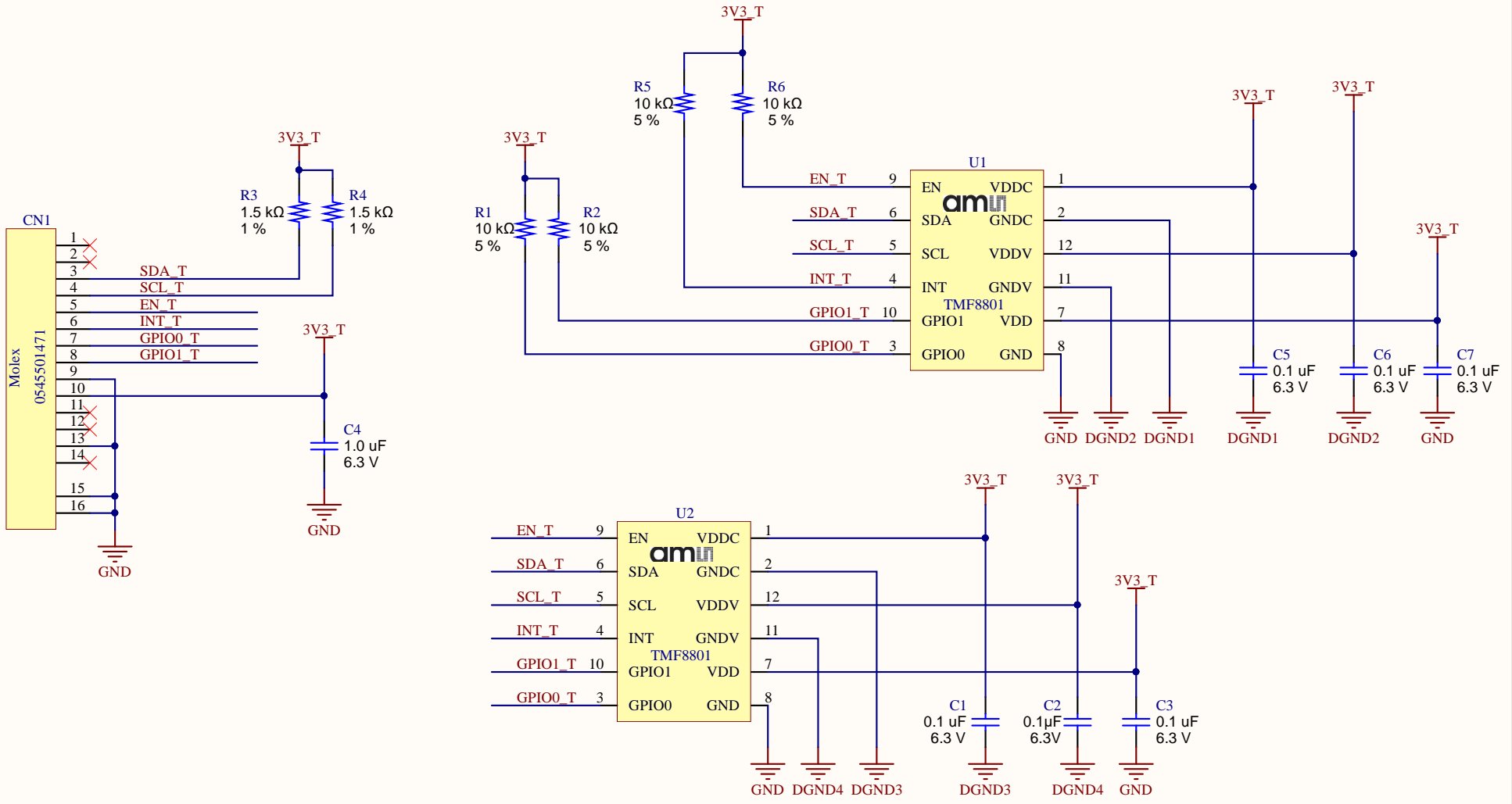
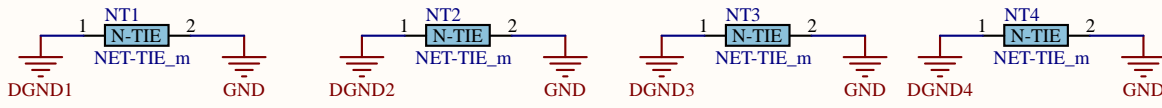
Version: A J.Dolic
Initial Release

Suggested Board Reflow Profile



Parameter	Reference	Device
Average temperature gradient in preheating		2.5 °C/sec
Soak time	t_{soak}	2 to 3 minutes
Time above 217 °C (T1)	t_1	Max 60 sec
Time above 230 °C (T2)	t_2	Max 50 sec
Time above $T_{peak} - 10$ °C (T3)	t_3	Max 10 sec
Peak temperature in reflow	T_{peak}	260 °C
Temperature gradient in cooling		Max -5 °C/sec

Title				TMF8801 Daughter Card			
Size		Number		Revision			
A		DC-TMF8801-01		B			
Date:		20.03.2019		Sheet 2		3 of	
File:		\\...\Project Page.SchDoc		Drawn By:		J.Dolic	



Either Place U1 or U2, but not both

Title: TMF8801 Daughter Card		
Board Number: DC-TMF8801-01	Rev: B	
		Date: 20.03.2019
		Author: J.Dolic
Sheet 3 of 3		

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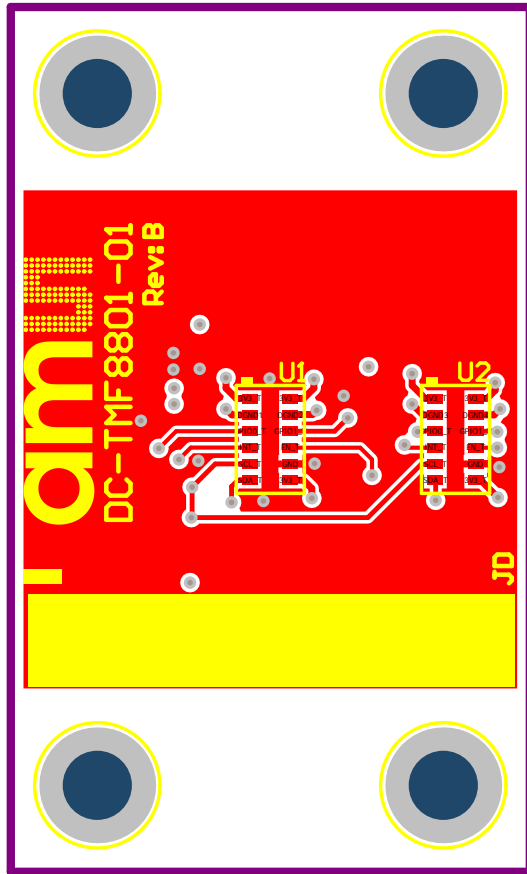
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Board Details

1. Board Size: 750mil x 1250mil +/- 10%
2. Board Thickness: 62mil +/- 10%
3. Board material: FR4 with 0.5oz Copper
4. Component count: 25
5. Pad Count: 80
6. Hole Count: 43
7. Soldermask Color: Black
8. Silkscreen Color: White
9. No Silkscreen over exposed copper.
10. PCB Manufacturer not to add any additional silkscreen
11. Fabricate to IPC-600 Class 1 unless otherwise specified
12. RoHS compliant
13. There are two score marks on this board.



Layers Currently On

Title_Block Top Layer		Top Overlay	
BoardOutline		Multi-Layer	
Title TMF8801 Daughter Card			
Number DC-TMF8801-01		Rev B	
Print Name Top Layer			
Variant: [No Variations]		Print Date: 20.03.2019	
File: PCB.PcbDoc		Drawn By: J.Dolic	

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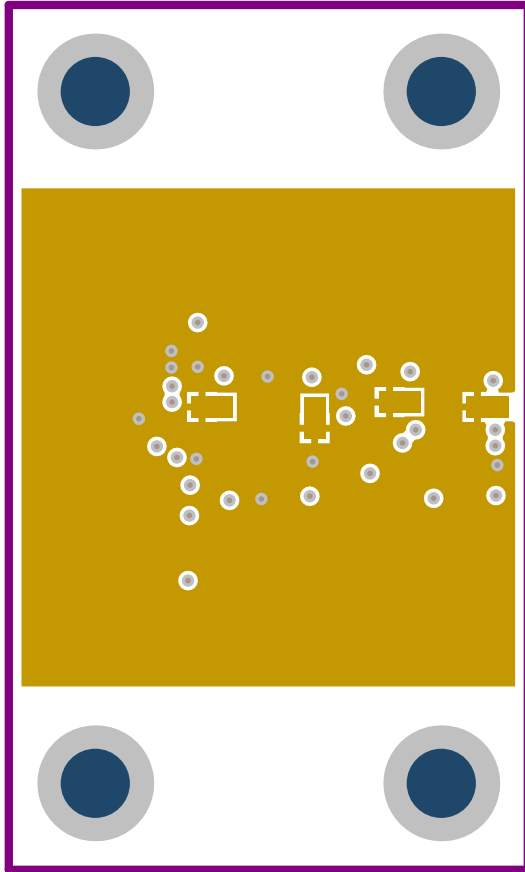
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Board Details

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- 2. Board Thickness: 62mil +/- 10%
- 3. Board material: FR4 with 0.5oz Copper
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- 12. RoHS compliant
- 13. There are two score marks on this board.



Layers Currently On

<p>Title_Block</p> <p>MID1</p> <p>BoardOutline</p>	<p>Multi-Layer</p>
--	--------------------

Title TMF8801 Daughter Card	
Number DC-TMF8801-01	Rev B
Print Name Mid1 Layer - GND	
Variant: [No Variations]	Print Date: 20.03.2019
File: PCB.PcbDoc	Drawn By: J.Dolic

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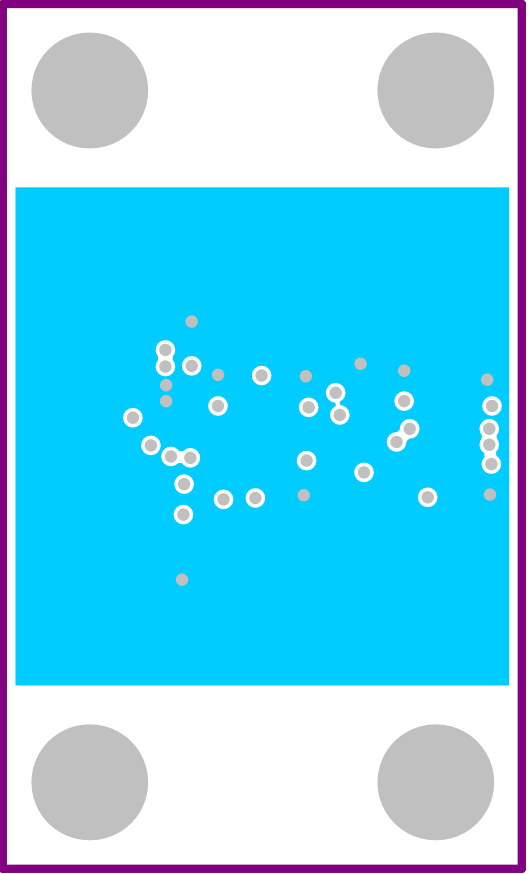
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Board Details

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- 2. Board Thickness: 62mil +/- 10%
- 3. Board material: FR4 with 0.5oz Copper
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- 5. Pad Count: 80
- 6. Hole Count: 43
- 7. Soldermask Color: Black
- 8. Silkscreen Color: White
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- 12. RoHS compliant
- 13. There are two score marks on this board.



Layers Currently On

Title_Block		Multi-Layer
MID2		
BoardOutline		
Title TMF8801 Daughter Card		
Number DC-TMF8801-01		Rev B
Print Name Mid2 Layer - PWR		
Variant: [No Variations]		Print Date: 20.03.2019
File: PCB.PcbDoc		Drawn By: J.Dolic

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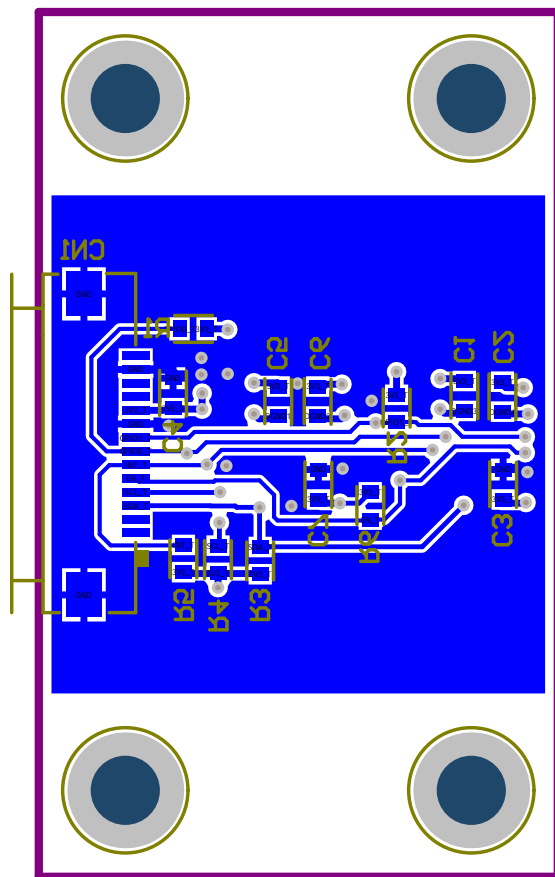
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Board Details

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2. Board Thickness: 62mil +/- 10%
3. Board material: FR4 with 0.5oz Copper
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13. There are two score marks on this board.



Layers Currently On

Title_Block		
Bottom Layer		
BoardOutline	Bottom Overlay	
	Multi-Layer	
Title	TMF8801 Daughter Card	
Number	DC-TMF8801-01	Rev B
Print Name	Bottom Layer	
Variant: [No Variations]	Print Date: 20.03.2019	
File: PCB.PcbDoc	Drawn By: J.Dolic	

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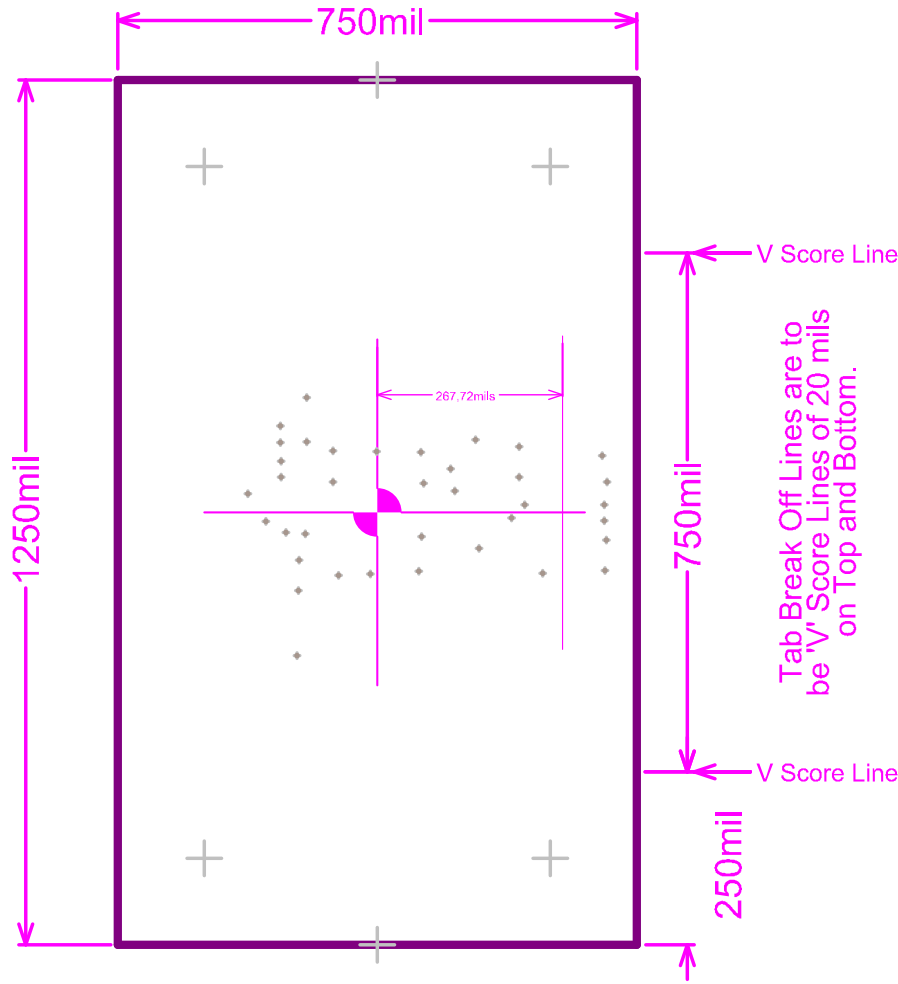
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Board Details

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- 2. Board Thickness: 62mil +/- 10%
- 3. Board material: FR4 with 0.5oz Copper
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Layers Currently On

<p>Title_Block</p> <p>Dimension BoardOutline</p>	<p>Drill Guide</p> <p>Keep-Out Layer Multi-Layer</p>
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Title		TMF8801 Daughter Card	
Number		DC-TMF8801-01	Rev B
Print Name			
Board Dimensions			
Variant: [No Variations]		Print Date: 20.03.2019	
File: PCB.PcbDoc		Drawn By: J.Dolic	

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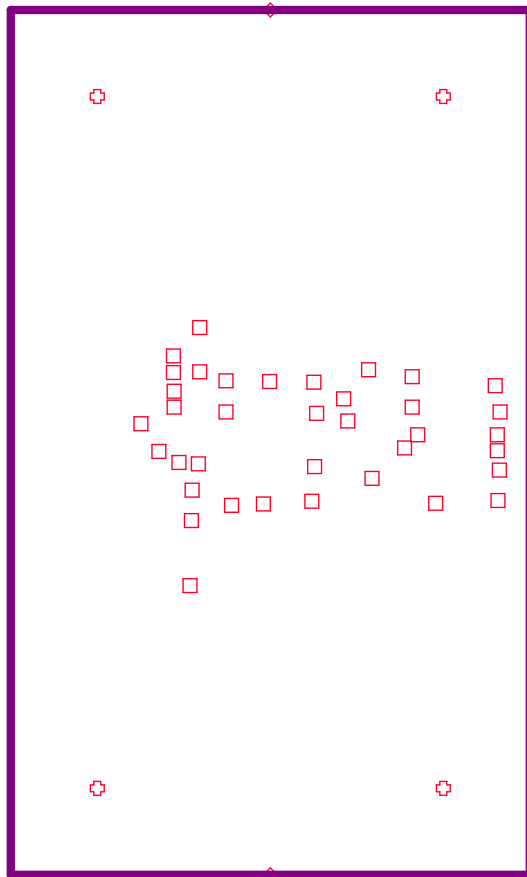
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Board Details

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2. Board Thickness: 62mil +/- 10%
3. Board material: FR4 with 0.5oz Copper
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6. Hole Count: 43
7. Soldermask Color: Black
8. Silkscreen Color: White
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13. There are two score marks on this board.



Symbol	Count	Hole Size	Plated	Hole Type	Drill Layer Pair	Via/Pad	Pad Shape	Technology
◇	2	100,00mil (2,540mm)	NPTH	Round	TOP - BOTTOM	Pad	Rounded	c0hn254
⊙	4	100,00mil (2,540mm)	PTH	Round	TOP - BOTTOM	Pad	Rounded	c425h254m435p425
□	37	8,00mil (0,203mm)	PTH	Round	TOP - BOTTOM	Via	Rounded	v46h20
	43 Total							

Layers Currently On

Title_Block		Drill Drawing	
BoardOutline			
Title TMF8801 Daughter Card			
Number DC-TMF8801-01		Rev B	
Print Name Drill Drawing			
Variant: [No Variations]		Print Date: 20.03.2019	
File: PCB.PcbDoc		Drawn By: J.Dolic	

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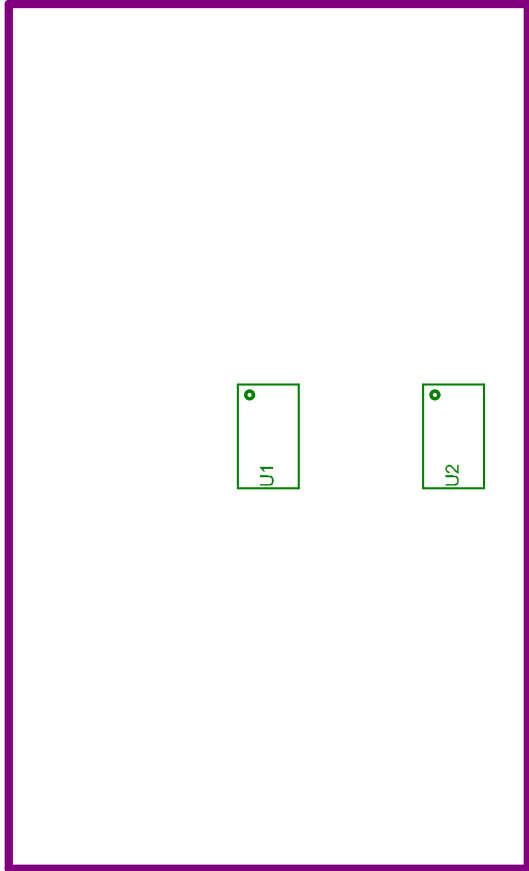
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Board Details

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- 13. There are two score marks on this board.



Layers Currently On

Title_Block		Multi-Layer
BoardOutline TopAssembly		
Title TMF8801 Daughter Card		
Number DC-TMF8801-01		Rev B
Print Name TOP Assembly		
Variant: [No Variations]		Print Date: 20.03.2019
File: PCB.PcbDoc		Drawn By: J.Dolic

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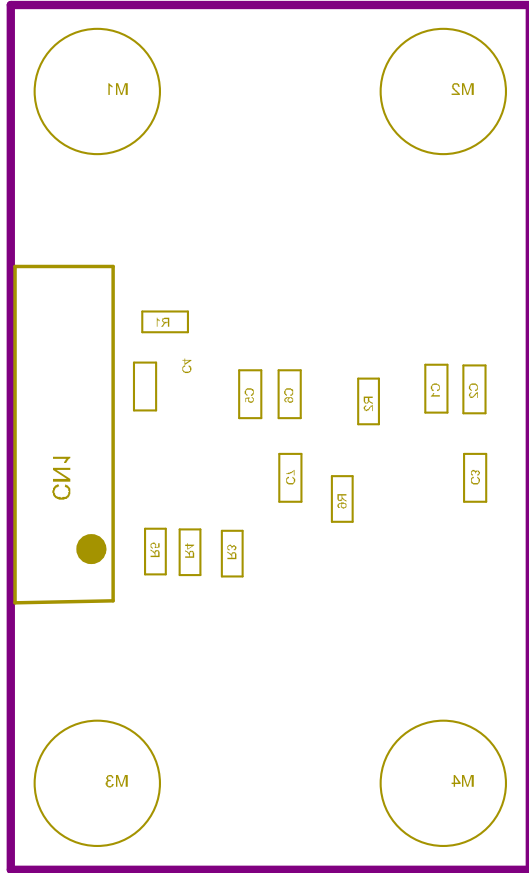
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Board Details

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- 3. Board material: FR4 with 0.5oz Copper
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- 5. Pad Count: 80
- 6. Hole Count: 43
- 7. Soldermask Color: Black
- 8. Silkscreen Color: White
- 9. No Silkscreen over exposed copper.
- 10. PCB Manufacturer not to add any additional silkscreen
- 11. Fabricate to IPC-600 Class 1 unless otherwise specified
- 12. RoHS compliant
- 13. There are two score marks on this board.



Layers Currently On

Title_Block	
BoardOutline	
BottomAssembly	
	Multi-Layer

Title		TMF8801 Daughter Card	
Number		DC-TMF8801-01	Rev B
Print Name			
BOTTOM Assembly Mirrored			
Variant: [No Variations]		Print Date: 20.03.2019	
File: PCB.PcbDoc		Drawn By: J.Dolic	

Design Rules Verification Report

Filename : \\fsup04\cnc_prodmgmt\OSL\11_HW_Application_PS\Dahar\Hardware\DC-Dual_T

Warnings 0
Rule Violations 0

Warnings	
Total	0

Rule Violations	
Clearance Constraint (Gap=5mil) (All),(All)	0
Short-Circuit Constraint (Allowed=No) (All),(All)	0
Short-Circuit Constraint (Allowed=Yes) (IsTextInverted),(All)	0
Un-Routed Net Constraint (All)	0
Width Constraint (Min=4.921mil) (Max=393.701mil) (Preferred=11.811mil) (All)	0
Power Plane Connect Rule(Relief Connect)(Expansion=15.748mil) (Conductor Width=5.906mil) (Air Gap=5.906mil)	0
Minimum Annular Ring (Minimum=5mil) (All)	0
Hole Size Constraint (Min=6mil) (Max=232.284mil) (All)	0
Hole To Hole Clearance (Gap=11.811mil) (All),(All)	0
Minimum Solder Mask Sliver (Gap=1mil) (All),(All)	0
Silk To Solder Mask (Clearance=0mil) (IsPad),(All)	0
Silk to Silk (Clearance=0mil) (All),(All)	0
Net Antennae (Tolerance=20mil) (All)	0
Height Constraint (Min=0mil) (Max=1000mil) (Preferred=500mil) (All)	0
Total	0

Electrical Rules Check Report

Class	Document	Message
Warning	Project Page.SchDoc	Incorrect link between project variant "Default Build" and schematic component Component R3 1K5,0402,1%
Warning	Project Page.SchDoc	Incorrect link between project variant "Default Build" and schematic component Component R4 1K5,0402,1%
Warning	Project Page.SchDoc	Incorrect link between project variant "Default Build" and schematic component Component U1 TOF
Warning	Project Page.SchDoc	Incorrect link between project variant "Default Build" and schematic component Component U2 TOF

Bill of Materials

TMF8801 Daughter Card



Source Data From: DC-TMF8801-01.PrjPcb
Project: DC-TMF8801-01.PrjPcb
Variant: None

Creation Date 20.03.2019 14:16:41
Print Date: 20-Mar-19 2:16:52 PM

Designator	Comment	Manufacturer	Manufacturer Part Number	Description	Alternate	Quantity
C1, C2, C3	0.1uF,6V3, 0402, 10%, 0.1uF,6V3,0402, 10%	Murata Electronics North America	GRM155R70J104KA01D	Cap 0.1uF,6V3, 0402, 10%		3
C4	1.0uF,6V3, 0402, 20%	AVX	04026D105MAT2A	Cap 1.0uF,6V3, 0402, 20%	YES	1
CN1	CONN FFC TOP 14POS 0.50MM R/A	Molex	0545501471	CONN FFC TOP 14POS 0.50MM R/A		1
M1, M2, M3, M4	Mounting Hole	PennEngineering	SMTO-M1-1ET	Mounting nut 0.1" Dia M1 thread		4
R1, R2, R5, R6	10K,0402,5%	Vishay Dale	CRCW040210K0JNED	Res, 10K, 0402, 5%		4
U2	TOF	ams AG	TMF8801	TOF		1
						14

Approved **Notes**
Parts with alternate marked as YES may be replaced by an equivalent with preapproval from AMS.
Parts from ams AG will be consigned

