

*** Valued Customer: If this stackup is accepted, please add this PDF to the production data package ***

Job number:	JC8023	Material:	Megtron 6, PCL-370HF
Part number:	TSW54J60	Impedance:	Yes
Customer:	TEXAS INSTRUMENTS	Date:	31-Mar-2015
Panel size:	16X18	Created by:	JACKIE

Stackup Report

Report v1.38 External

G O R I L L A
CIRCUITS INC.



Layer	Type	Cu Weight	Cu %	Material Description	Via Structure	Segment	Glass Style	Material Family	Dielectric constant	Copper Plating Thickness [mil]	Thickness after lamination [mil]
Soldermask											0.80
L1	Signal	H	50	Press thk = 10.32 mil		Foil				1.40	2.00 *
						Prepreg	3313(54)	Megtron 6	3.50		10.32
							3313(54)	Megtron 6	3.50		
							3313(54)	Megtron 6	3.50		
L2	Plane	H	70			Core		PCL-370HR	3.90		0.60
L3	Plane	H	70	4.0 mil H/H							4.00
											0.60
				Press thk = 7.22 mil		Prepreg	2113(58)	PCL-370HR	3.90		7.22
							2113(58)	PCL-370HR	3.90		
	Filler			12.0 mil -/-		Core		PCL-370HR	3.90		12.00
						Prepreg	2113(58)	PCL-370HR	3.90		7.10
				Press thk = 7.10 mil			2113(58)	PCL-370HR	3.90		
L4	Mixed	H	50			Core		PCL-370HR	3.90		0.60
L5	Plane	H	70	4.0 mil H/H							4.00
											0.60
				Press thk = 10.32 mil		Prepreg	3313(54)	Megtron 6	3.50		10.32
							3313(54)	Megtron 6	3.50		
							3313(54)	Megtron 6	3.50		
L6	Signal	H	50			Foil				1.40	2.00 *
Soldermask											0.80

* Estimated Cu Plating for reference use only.

Specification (Over mask on plated copper:)	mil
Overall Board Thickness:	62.00
Tolerance:	+6.2/-6.2
Min-Max Board Thickness:	55.8-68.2

Anticipated Board Thickness:	mil
After lamination:	58.56
Over mask on plated copper::	62.96

Impedance Table

Layer	Impedance Requirement [ohms]	Tolerance [ohms]		Type	Upper Ref	Lower Ref	Designed Line Width [mil]	Plotted Line Width [mil]	Designed Spacing [mil]	Coplanar Spacing [mil]	Finished Line Width [mil]	Finished Spacing [mil]	Impedance Simulation [ohms]
		+	-										
L1	50	5.0	5.0	Coated SE CoPlanar	--	L2	19.00	19.50	--	15.00	19.00	--	49.9
L1	100	10.0	10.0	Coated microstrip Diff	--	L2	8.50	9.50	6.50	--	9.00	6.00	100.6
L6	50	5.0	5.0	Coated SE CoPlanar	--	L5	19.00	19.50	--	15.00	19.00	--	49.9
L6	100	10.0	10.0	Coated microstrip Diff	--	L5	8.50	9.50	6.50	--	9.00	6.00	100.6

Remarks:

Please Note: The stackup may change if the final manufacturing data is different from the information used to create this stackup

Mat Typ	Material Description	Rsn%	PNL	1 Pnl	Notes
Foil	Foil - 0.5 oz - Foil		16x18	2	
Prepreg	Megtron 6 - 3313	54%	16x18	6	
Core	PCL-370HR - 4.0 mil H/H		16x18	2	
Core	PCL-370HR - 12.0 mil 0/0		16x18	1	
Prepreg	PCL-370HR - 2113	58%	16x18	4	

Drill Progs	Technology	Depth
Drill1	Mechanical	58.56

Please Note:

IPC-6012 has a minimum dielectric requirement of 0.003543" and any targeted dielectric thickness of 0.0045" or less may violate this requirement.

Acceptance of this proposed stack-up will be taken as a waiver for this requirement. Note that with this exception, the minimum dielectric thickness shall be 0.000984". If this is not acceptable please get back to us ASAP so we can make the necessary changes.

If we do not hear back from you within 24 hours, we will proceed with this stack-up. Note that the granting of this waiver does not affect the product meeting IPC-6012 Class 2 or Class 3 requirements. Also note that targeted thickness .0046" and greater shall have a minimum tolerance of +/- .001 after lamination.