



Material Composition Declaration

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This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.

Adobe Reader version 7.0.5 is required to complete this declaration.

1752-2 1.1	IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x	Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat
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Supplier Information

Company Name * SEMTECH CORPORATION	Company Unique ID 00-847-9941	Unique ID Authority DUNS	Response Date * 2017-01-11	Response Document ID				
Contact Name * Roya Motamedi	Title - Contact Supervisor, QA Product Support	Phone - Contact * 805-498-2111	Email - Contact * rmotamedi@semtech.com	Duplicate Contact -> Authorized Representative				
Authorized Representative * Roya Motamedi	Title - Representative Supervisor, QA Product Support	Phone - Representative * 805-498-2111	Email - Representative * rmotamedi@semtech.com	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
	PClamp1201P.TNT	PowerClamp High-Surge TVS D			China	2.153	mg	Each
Alternate Recommendation				Alternate Item Comments				

Manufacturing Process Information

Terminal Plating / Grid Array Material Nickel/Palladium/Gold (Ni/Pd/Au)	Terminal Base Alloy CU Alloy	J-STD-020 MSL Rating 1	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments

PClamp1201P.TNT is REACH-compliant product, per EU Regulation EC1907/2006 to include recent addition of SVHC candidate list of substances in June 2016.

Save the fields in this form to a file

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Lock the fields on this form to prevent changes

Lock Supplier Fields

RoHS Material Composition Declaration

Declaration Type *

Detailed

RoHS Directive 2002/95/EC **RoHS Definition:** Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2002/95/EC and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a RoHS restricted substance?) in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply.

RoHS Declaration * 1 - Item(s) does not contain RoHS restricted substances per the definition above

Supplier Acceptance * Accepted

Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions.

Declaration Signature

Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature

Homogeneous Material Composition Declaration for Electronic Products

SubItem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

Line Functions: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

		Item/SubItem Name		Homogeneous Material		Weight	Unit of Measure	Level		Substance Category	Substance		CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM					
																	-	+						
+I	-I	Die	+M	-M	Doped silicon	0.2261	mg	+C	-C	Supplier	+S	-S	Si	7440-21-3		0.2261	mg			104,98				
+I	-I	Leadframe	+M	-M	SGP1610N2 Sub	1.172	mg	+C	-C	Supplier	+S	-S	Bismaleimide Triazine r	105391-33-1		0.1384	mg			64,273				
											+S	-S	Inorganic Filler	21645-51-2		0.0692	mg			32,137				
											+S	-S	Continuous Filament Fi	65997-17-3		0.1384	mg			64,273				
											+S	-S	Copper	7440-50-8		0.346	mg			160,68				
											+S	-S	Acrylic Esters	26376-86-3		0.0803	mg			37,298				
											+S	-S	Organic black dye	----		0.0013	mg			625				
											+S	-S	Barium Sulfate	7727-43-7		0.0811	mg			37,659				
											+S	-S	Talc	14807-96-6		0.0068	mg			3,151				
											+S	-S	Silica crystalline	7631-86-9		0.007	mg			3,233				
											+S	-S	Activator	----		0.0141	mg			6,529				
											+S	-S	Amine compound	----		0.0008	mg			389				
											+S	-S	Defoamer	----		0.0061	mg			2,811				
											+S	-S	Dipropyl glycol dinitrate	112-15-2		0.027	mg			12,539				
											+S	-S	Heavy aromatic solvent	64742-94-5		0.0277	mg			12,869				
											+S	-S	Naphthalene	91-20-3		0.0016	mg			747				
			+M	-M	NiPdAu plating	0.073	mg	+C	-C	B	+S	-S	Nickel	7440-02-0		0.0061	mg			2,840				
											+C	-C	Supplier	middle plating	+S	-S	Pd	7440-05-3		0.0601	mg			27,924
											+C	-C	Supplier	outer plating	+S	-S	Au	7440-57-5		0.0071	mg			3,313
+I	-I	Bonding wire	+M	-M	CuPd	0.008	mg	+C	-C	Supplier	+S	-S	Cu	7440-50-8		0.0074	mg			3,433				
											+S	-S	Pd	7440-05-3		0.0002	mg			88				
+I	-I	Molding compound	+M	-M	EME-G760L	0.808	mg	+C	-C	Supplier	+S	-S	Silica (Amorphous) A	60676-8 6-0		0.6265	mg			290,93				
											+S	-S	Silica (Amorphous) B	7631-86-9		0.0647	mg			30,032				

+S	-S	Epoxy resin	Proprietary		0.0647	mg			30,032
+S	-S	Phenol resin	9003-35-4		0.0243	mg			11,262
+S	-S	Metal Hydroxide	Proprietary		0.0243	mg			11,262
+S	-S	Carbon Black	1333-86-4		0.004	mg			1,877

+I	-I	Die attached epoxy	+M	-M	CDF715P	0.092	mg	+C	-C	Supplier		+S	-S	Silver	7440-22-4		0.0779	mg			36,169
												+S	-S	Bismaleimide resin	Proprietary		0.0055	mg			2,568
												+S	-S	Modified epoxy resin	Proprietary		0.0028	mg			1,284
												+S	-S	Acrylic resin	Proprietary		0.0028	mg			1,284
												+S	-S	Epoxy-terminated polya	Proprietary		0.0028	mg			1,284
												+S	-S	Methylacrylic acid, Pd(2	Proprietary		0.0005	mg			214