ASSOCIATION ELECTRONICS	© (aterial Compo Copyright 2005. IPC, Bannoc international and Pan-Ameri	kburn, Illinois	. All rights reserv	tion with lower	level	parts, the	declaration	encom	passes all l		erials for whic	if the item is an assembly the the manufacturer has his declaration.		
1752-2 1.	.1	Web Site for Informat p://www.ipc.org/IPC-1	1752 Standard						laration Class * ss 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat						
Supplier Inf	formation														
Company Na	ame *	Company Unique ID		Unique ID Authority			Response Date *			Response D	ocument ID				
pSemi Corp	ı						09-14								
Contact Nan	ne *	Title - Contact		Phone - Contact *			I - Contac	t *		Duplicate Contact -> Authorized Representative					
Allan Alvarado		Sr. Quality Engineer		8587319409			rado@pse	emi.com		Duplica	ate Contact	-> Authorized	Representative		
Authorized Representative *		Title - Representative		Phone - Representative *		Email - Representative *			*	Supplier Comments or URL for Additional Information					
Allan Alvara	ido	Sr. Quality Engineer		8587319409	aalvarado@psemi.com										
Requeste	er Item Number	Mfr Item Number		Mfr Item Name	Effective Date Version		Version	Manufacturing Site		Weight *	UOM	Unit Type			
		PE43712		UltraCMOS RF Digital Step Atte			2018-09-14				74.737343	3 mg	Each		
Alternate Recommendation						Alternate Item			Comments						
Manufactu	ring Process I	nformation													
Terminal Plating / Grid Array Material Terminal Ba				ase Alloy	ting Peak Process Body			Tempera	ture Max Tir	me at Peak Tem	Peak Temperature Number of Refl				
Nickel/Palladium/Gold (Ni/Pd/Au) - ENEPIG CU Alloy Comments				,	1			2	60 C		30 se	econds 3			

Save the fields in Import fields from a Clear all of the Lock the fields on this **Export Data** Import Data Reset Form Lock Supplier Fields this form to a file file into this form fields on this form form to prevent changes **RoHS Material Composition Declaration Declaration Type *** Detailed Rohs Directive Rohs Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenvls (PBB). Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium 2002/95/EC 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. 1 - Item(s) does not contain RoHS restricted substances per the definition above Supplier Acceptance * Accepted **RoHS Declaration *** 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

Subltem 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		Homogeneous	Weight	Unit of		Level	Substance Category			Substance	CAS	Exempt	Weight	Unit of	Tole	rance	PPM
	Name		Material		Measure			, , , , , , , , , , , , , , , , , , ,						, and the same	Measure	-	+	
+1 -1	PE43712	+M -M	Die	2.28128	mg	+C -C	Supplier	Integrated circuit	+S	-S	Aluminum oxide	1344-28-1		2.249951	mg	0	0	986,26
									+S	-S	Aluminum	7429-90-5		0.006844	mg	0	0	3,000
									+S	-S	Silicon	7440-21-3		0.000456	mg	0	0	200
						+C -C	В	Arsenic/Arsenic Comp	+S	-S	Arsenic	7440-38-2		0.000002	mg	0	0	1
						+C -C	Supplier	Integrated circiut	+8	-s	Boron	7440-42-8		0.000002	mg	0	0	1
									+S	-s	Phosphorus	7723-14-0		0.000009	mg	0	0	4
									+S	-S	Titanium	7440-32-6		0.001141	mg	0	0	500
									+S	-S	Tungsten	7440-33-7		0.022813	mg	0	0	10,000
									+S	-s	Cobalt	7440-48-4		0.000046	mg	0	0	20
									+S	-s	Copper	7440-50-8		0.000018	mg	0	0	8
		+M -M	Leadframe	39.2146	mg	+C -C	Supplier	Leadframe	+S	-s	Copper	7440-50-8		38.2117	mg	0	0	974,42
									+S	-s	Iron	7439-89-6		0.9215	mg	0	0	23,500
									+S	-S	Zinc	7440-66-6		0.049	mg	0	0	1,249
									+S	-S	Phosphorus	7723-14-0		0.0324	mg	0	0	826
		+M -M	Wire	1.633	mg	+C -C	Supplier	Interconnect	+S	-s	Gold	7440-57-5		1.633	mg	0	0	1,000,0
		+M -M	Plating	0.711	mg	+C -C	В	Nickel (external applic	+S	-s	Nickel	7440-02-0		0.681	mg	0	0	957,80
			-			+C -C	Supplier	Plating	+S	-S	Palladium	7440-05-3		0.019	mg	0	0	26,722
									+S	s-	Gold	7440-57-5		0.006	mg	0	0	8,440
									+S	-S	Silver	7440-22-4		0.005	mg	0	0	7,032
		+M -M	Die attach	0.52846	mg	+C -C	Supplier	Adhesive	+S	-S	Proprietary acrylates	Proprietary		0.0687	mg	0	0	130,00
									+S	-S	Silver	7440-22-4		0.42278	mg	0	0	800,02
									+S	-S	Proprietary Bismaleimic	Proprietary		0.01585	mg	0	0	29,993
									+S	-S	Methacrylate ester	Proprietary		0.01585	mg	0	0	29,993

+S -S Polymer	Proprietary		0.00528	mg		0	0	9,992								
+M -M Molding compou 30.369 mg +	C -C Supplier	Encap	ncapsulant			-S	Epoxy resin		Pro	Proprietary		2.747	mg	0	0	90,454
	<u> </u>				+S	-S	Silica	fused	60	0676-86-0		26.249	mg	0	0	864,33
					+S	-S	Pheno	l resin	Pr	roprietary		1.373	mg	0	0	45,211