



**48L – QFN 6x6x0.6mm
(Saw Version)
Pb-Free Package**

PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	LQ	Body Size (mil/mm)	6x6x0.6mm
Package Weight – Site 1	B1 :68.0101 mg B2 :66.6290 mg	Package Weight – Site 2	74.0201 mg
Package Weight – Site 3	B1: 68.0130 mg B2: 65.0001 mg B3: 65.0001 mg B4: 64.2354 mg	Package Weight – Site 4	N/A

SUMMARY

The 48L – QFN Pb-Free package is compliant to RoHS. Cypress Ordering Part Numbers containing an “X” (e.g. CY7C1328G-133AXI, CY2308SXC-1HT) meet the Directive 2002/95/EC (RoHS) requirement.

**ASSEMBLY Site 1: Cypress Manufacturing Limited (CML)
Package Qualification Report # 095005, 120205 (See Note 1)**

I. DECLARATION OF PACKAGED UNITS

A. BANNED SUBSTANCES

Materials from Level A of the EIA/JIG/JGPSSI/EICTA Material Composition Declaration Guide and EU RoHS. Listed in the table below are materials that are neither contained nor intentionally added to this product.

Substances / Compounds	Weight by mg	PPM	Analysis Report (Note 2)
Cadmium and Cadmium Compounds	0	< 5.0	CoA-LQ48-CML
Hexavalent Chromium and its Compounds	0	< 5.0	
Lead and Lead Compounds	0	< 5.0	
Mercury and Mercury Compounds	0	< 5.0	
Polybrominated Biphenyls (PBB)	0	< 5.0	
Polybrominated Diphenylethers (PBDE)	0	< 5.0	
Asbestos	0	0	As per MSDS
Azo colorants	0	0	As per MSDS
Ozone Depleting Substances	0	0	As per MSDS
Polychlorinated Biphenyls (PCBs)	0	0	As per MSDS
Polychlorinated Napthalenes	0	0	As per MSDS
Radioactive Substances	0	0	As per MSDS
Shortchain Chlorinated Paraffins	0	0	As per MSDS
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	0	0	As per MSDS
Tributyl Tin Oxide (TBTO)	0	0	As per MSDS
Formaldehyde	0	0	As per MSDS

Note 1: Qualification reports are available at www.cypress.com. Access them by doing a Search on the Report #.

Note 2: Report available from Cypress Sales Offices or Distributors.

Note 3: Materials/substances not declared in Section I-A and I-B of this document are considered “non-existent in the product” or a natural impurity. In order to report exactly 100% material composition, some numbers were rounded to the nearest 0.01 percent. Cypress Semiconductor PMDD’s are calculated using MSDS, Material Analysis Reports and Cypress Assembly site information.

Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**48L – QFN 6x6x0.6mm
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B1. MATERIAL COMPOSITION (Note 3)

Using Gold Wire

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	34.8725	96.2000%	512,755	51.2755
		Nickel	7440-02-0	1.0875	3.0000%	15,991	1.5990
		Silicon	7440-21-3	0.2356	0.6500%	3,465	0.3465
		Magnesium	7439-95-4	0.0544	0.1500%	800	0.0800
Lead Finish	External Plating	Nickel	7440-02-0	0.7239	96.5200%	10,708	1.0644
		Palladium	7440-05-3	0.0131	1.7400%	193	0.0192
		Gold	7440-57-5	0.0131	1.7400%	193	0.0192
Die Attach	Adhesive	Ag	7440-22-4	0.3626	74.0000%	5,316	0.5332
		Carbocyclic Acrylate	-----	0.0980	20.0000%	1,437	0.1441
		Bismaleimide Resin	-----	0.0098	2.0000%	144	0.0144
		Additive	-----	0.0098	2.0000%	144	0.0144
		Acrylate ester	-----	0.0098	2.0000%	144	0.0144
Die	Circuit	Silicon	7440-21-3	6.8400	100.0000%	100,572	10.0573
Wire	Interconnect	Gold	7440-57-5	2.5344	99.0000%	37,163	3.7265
		Palladium	7440-05-3	0.0256	1.0000%	375	0.0376
Mold Compound	Encapsulation	SiO2	60676-86-0	17.6352	83.5000%	259,341	25.9303
		Metal OH	-----	0.6336	3.0000%	9,318	0.9316
		Phenol Resin	-----	0.8448	4.0000%	12,424	1.2422
		Epoxy Resin	-----	0.8448	4.0000%	12,424	1.2422
		Carbon Black	1333-86-4	0.1056	0.5000%	1,553	0.1553
		Crystalline Silica	14808-60-7	1.0560	5.0000%	15,529	1.5527
Package Weight (mg):				68.0101		% Total:	100.0000

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**48L – QFN 6x6x0.6mm
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B2. MATERIAL COMPOSITION (Note 3)

Using Copper Wire

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	34.8700	96.1931%	523,346	52.3346%
		Nickel	7440-02-0	1.0900	3.0069%	16,359	1.6359%
		Silicon	7440-21-3	0.2400	0.6621%	3,602	0.3602%
		Magnesium	7439-95-4	0.0500	0.1379%	750	0.0750%
Lead Finish	External Plating	Nickel	7440-02-0	0.7300	97.3333%	10,956	1.0956%
		Palladium	7440-05-3	0.0100	1.3333%	150	0.0150%
		Gold	7440-57-5	0.0100	1.3333%	150	0.0150%
Die Attach	Adhesive	Ag	7440-22-4	0.3600	73.4694%	5,403	0.5403%
		Carbocyclic Acrylate	-----	0.1000	20.4082%	1,501	0.1501%
		Bismaleimide Resin	-----	0.0100	2.0408%	150	0.0150%
		Additive	-----	0.0100	2.0408%	150	0.0150%
		Acrylate ester	-----	0.0100	2.0408%	150	0.0150%
Die	Circuit	Silicon	7440-21-3	6.8400	100.0000%	102,658	10.2658%
Wire	Interconnect	Copper	7440-50-8	1.1790	100.0000%	17,695	1.7695%
Mold Compound	Encapsulation	SiO2	60676-86-0	17.6400	83.5227%	264,750	26.4750%
		Metal OH	-----	0.6300	2.9830%	9,455	0.9455%
		Phenol Resin	-----	0.8400	3.9773%	12,607	1.2607%
		Epoxy Resin	-----	0.8400	3.9773%	12,607	1.2607%
		Carbon Black	1333-86-4	0.1100	0.5208%	1,651	0.1651%
		Crystalline Silica	14808-60-7	1.0600	5.0189%	15,909	1.5909%
Package Weight (mg):				66.6290	% Total:		100.0000

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-CART-R
	Plastic Reel	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-PLRL-R
Tray	Tray	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-TRAY-R
Others	Shielding bag	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-SBAG –R

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**ASSEMBLY Site 2: Amkor Technology Seoul Korea
Package Qualification Report # 104807 (See Note 1)**

I. DECLARATION OF PACKAGED UNITS

A. BANNED SUBSTANCES

Materials from Level A of the EIA/JIG/JGPSSI/EICTA Material Composition Declaration Guide and EU RoHS. Listed in the table below are materials that are neither contained nor intentionally added to this product.

Substances / Compounds	Weight by mg	PPM	Analysis Report (Note 2)
Cadmium and Cadmium Compounds	0	< 5.0	CoA-LQ48- Amkor Seoul
Hexavalent Chromium and its Compounds	0	< 5.0	
Lead and Lead Compounds	0	< 5.0	
Mercury and Mercury Compounds	0	< 5.0	
Polybrominated Biphenyls (PBB)	0	< 5.0	
Polybrominated Diphenylethers (PBDE)	0	< 5.0	
Asbestos	0	0	As per MSDS
Azo colorants	0	0	As per MSDS
Ozone Depleting Substances	0	0	As per MSDS
Polychlorinated Biphenyls (PCBs)	0	0	As per MSDS
Polychlorinated Naphthalenes	0	0	As per MSDS
Radioactive Substances	0	0	As per MSDS
Shortchain Chlorinated Paraffins	0	0	As per MSDS
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	0	0	As per MSDS
Tributyl Tin Oxide (TBTO)	0	0	As per MSDS
Formaldehyde	0	0	As per MSDS

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Note 2: Report available from Cypress Sales Offices or Distributors.

Note 3: Materials/substances not declared in Section I-A and I-B of this document are considered "non-existent in the product" or a natural impurity. In order to report exactly 100% material composition, some numbers were rounded to the nearest 0.01 percent. Cypress Semiconductor PMDD's are calculated using MSDS, Material Analysis Reports and Cypress Assembly site information.

Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**48L – QFN 6x6x0.6mm
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B. MATERIAL COMPOSITION (Note 3)

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	42.3345	97.5000%	571,933	57.1933
		Iron	7439-89-6	1.0204	2.3500%	13,785	1.3785
		Phosphorous	7723-14-0	0.0130	0.0300%	176	0.0176
		Zinc	7440-66-6	0.0521	0.1200%	704	0.0704
Lead Finish	External Plating	Nickel	7440-02-0	0.8459	97.2300%	11,428	1.1428
		Palladium	7440-05-3	0.0190	2.1800%	256	0.0256
		Gold – Silver	7440-57-5	0.0051	0.5900%	69	0.0069
			7440-22-4				
Die Attach	Adhesive	Silver	7440-22-4	0.7476	84.0000%	10,100	1.0100
		Bisphenol F type Liquid Epoxy Resin	9003-36-5	0.0623	7.0000%	842	0.0842
			Epoxy Resin	-----	0.0534	6.0000%	721
		P-Tertbutylphenyl glycidyl ether	3101-60-8	0.0223	2.5000%	301	0.0301
		1-cyanoguanidine	461-58-5	0.0045	0.5000%	60	0.0060
Die	Circuit	Silicon	7440-21-3	3.6900	100.0000%	49,851	4.9851
Wire	Interconnect	Gold	7440-57-5	0.6336	99.0000%	8,560	0.8560
		Palladium	7440-05-3	0.0064	1.0000%	86	0.0086
Mold Compound	Encapsulation	Epoxy Resin	-----	1.8383	7.5000%	24,835	2.4835
		Phenolic resin	-----	1.2255	5.0000%	16,556	1.6556
		Silica, vitreous (SiO2)	60676-86-0	21.3237	87.0000%	288,080	28.8080
		Carbon black	1333-86-4	0.0735	0.3000%	993	0.0993
		Bismuth compounds	-----	0.0245	0.1000%	331	0.0331
		Organic Phosphorous compounds	-----	0.0245	0.1000%	331	0.0331
Package Weight (mg):				74.0201		% Total:	100.0000

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-CART-R
	Plastic Reel	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-PLRL-R
Tray	Tray	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-TRAY-R
Others	Shielding bag	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-SBAG –R

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**ASSEMBLY Site 3: Advanced Semiconductor Engineering Taiwan (ASET)
Package Qualification Report # 112105, 114403 / 120606 / 130904 (See Note 1)**

I. DECLARATION OF PACKAGED UNITS

A. BANNED SUBSTANCES

Materials from Level A of the EIA/JIG/JGPSSI/EICTA Material Composition Declaration Guide and EU RoHS. Listed in the table below are materials that are neither contained nor intentionally added to this product.

Substances / Compounds	Weight by mg	PPM	Analysis Report (Note 2)
Cadmium and Cadmium Compounds	0	< 5.0	CoA-LQ48-ASET
Hexavalent Chromium and its Compounds	0	< 5.0	
Lead and Lead Compounds	0	< 5.0	
Mercury and Mercury Compounds	0	< 5.0	
Polybrominated Biphenyls (PBB)	0	< 5.0	
Polybrominated Diphenylethers (PBDE)	0	< 5.0	
Asbestos	0	0	As per MSDS
Azo colorants	0	0	As per MSDS
Ozone Depleting Substances	0	0	As per MSDS
Polychlorinated Biphenyls (PCBs)	0	0	As per MSDS
Polychlorinated Naphthalenes	0	0	As per MSDS
Radioactive Substances	0	0	As per MSDS
Shortchain Chlorinated Paraffins	0	0	As per MSDS
Tributyl Tin (TBT) and Triphenyl Tin (TPT)	0	0	As per MSDS
Tributyl Tin Oxide (TBTO)	0	0	As per MSDS
Formaldehyde	0	0	As per MSDS

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**48L – QFN 6x6x0.6mm
(Saw Version)
Pb-Free Package**

B1. MATERIAL COMPOSITION (Note 3)

Using Gold Wire

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	28.1770	99.1800%	414,290	41.4290
		Silicon	7440-21-3	0.1903	0.6700%	2,799	0.2799
		Magnesium	7439-95-4	0.0455	0.1600%	668	0.0668
Lead Finish	External Plating	Nickel	7440-02-0	1.5784	99.2700%	23,207	2.3207
		Palladium	7440-05-3	0.0027	0.1700%	40	0.0040
		Gold	7440-57-5	0.0089	0.5600%	131	0.0131
Die Attach	Adhesive	Silver	7440-22-4	1.2670	70.0000%	18,629	1.8629
		Acrylic Resin	-----	0.1358	7.5000%	1,996	0.1996
		Polybutadiene derivative	-----	0.1674	9.2500%	2,462	0.2462
		Butadiene copolymer	-----	0.0634	3.5000%	931	0.0931
		Acrylate	-----	0.1358	7.5000%	1,996	0.1996
		Peroxide	-----	0.0181	1.0000%	266	0.0266
Die	Circuit	Additive	-----	0.0226	1.2500%	333	0.0333
		Silicon	7440-21-3	3.0000	100.0000%	44,109	4.4109
Wire	Interconnect	Gold	7440-57-5	0.5000	99.9900%	7,351	0.7351
		Ion Impurities	-----	0.0001	0.0100%	1	0.0001
Mold Compound	Encapsulation	Epoxy Resin A	-----	1.4715	4.5000%	21,636	2.1636
		Epoxy Resin B	-----	0.9810	3.0000%	14,424	1.4424
		Phenol Resin	-----	2.1582	6.6000%	31,732	3.1732
		Carbon Black	1333-86-4	0.1635	0.5000%	2,404	0.2404
		Silica Fused	60676-86-0	27.9258	85.4000%	410,596	41.0596
Package Weight (mg):				68.0130		% Total:	100.0000

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



**48L – QFN 6x6x0.6mm
(Saw Version)
Pb-Free Package**

B2. MATERIAL COMPOSITION (Note 3)
USING COPPER-PALLADIUM WIRE

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	34.7513	96.2000	534,635	53.4635
		Silicon	7440-21-3	0.2348	0.6500	3,612	0.3612
		Magnesium	7439-95-4	0.0542	0.1500	834	0.0834
		Nickel	7440-02-0	1.0837	3.0000	16,673	1.6673
Lead Finish	External Plating	Nickel	7440-02-0	0.7058	95.2500	10,859	1.0859
		Palladium	7440-05-3	0.0273	3.6800	420	0.0420
		Gold	7440-57-5	0.0079	1.0700	122	0.0122
Die Attach	Adhesive	Silver	7440-22-4	1.2600	70.0000	19,385	1.9385
		Acrylic Resin	-----	0.1350	7.5000	2,077	0.2077
		Polybutadiene derivative	-----	0.1665	9.2500	2,562	0.2562
		Butadiene copolymer	-----	0.0630	3.5000	969	0.0969
		Acrylate	-----	0.1350	7.5000	2,077	0.2077
		Peroxide	-----	0.0180	1.0000	277	0.0277
		Additive	-----	0.0225	1.2500	346	0.0346
Die	Circuit	Silicon	7440-21-3	3.0000	100.0000	46,154	4.6154
Wire	Interconnect	Copper	7440-50-8	0.4865	97.3000	7,485	0.7485
		Palladium	7440-05-3	0.0135	2.7000	208	0.0208
Mold Compound	Encapsulation	Epoxy Resin A	-----	1.0276	4.5000	15,809	1.5809
		Epoxy Resin B	-----	0.6851	3.0000	10,539	1.0539
		Phenol Resin	-----	1.5071	6.6000	23,186	2.3186
		Carbon Black	1333-86-4	0.1142	0.5000	1,757	0.1757
		Silica Fused	60676-86-0	19.5011	85.4000	300,017	30.0017
Package Weight (mg):				65.0001		% Total:	100.0000

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**48L – QFN 6x6x0.6mm
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**B3. MATERIAL COMPOSITION (Note 3)
USING PURE COPPER WIRE**

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% Weight of substance per Homogeneous material	PPM	% weight of substance per package
Lead Frame	Base material	Copper	7440-50-8	34.7513	96.2000	534,635	53.4635
		Silicon	7440-21-3	0.2348	0.6500	3,612	0.3612
		Magnesium	7439-95-4	0.0542	0.1500	834	0.0834
		Nickel	7440-02-0	1.0837	3.0000	16,673	1.6673
Lead Finish	External Plating	Nickel	7440-02-0	0.7058	95.2500	10,859	1.0859
		Palladium	7440-05-3	0.0273	3.6800	420	0.0420
		Gold	7440-57-5	0.0079	1.0700	122	0.0122
Die Attach	Adhesive	Silver	7440-22-4	1.2600	70.0000	19,385	1.9385
		Acrylic Resin	-----	0.1350	7.5000	2,077	0.2077
		Polybutadiene derivative	-----	0.1665	9.2500	2,562	0.2562
		Butadiene copolymer	-----	0.0630	3.5000	969	0.0969
		Acrylate	-----	0.1350	7.5000	2,077	0.2077
		Peroxide	-----	0.0180	1.0000	277	0.0277
Die	Circuit	Additive	-----	0.0225	1.2500	346	0.0346
Wire	Interconnect	Silicon	7440-21-3	3.0000	100.0000	46,154	4.6154
Mold Compound	Encapsulation	Copper	7440-50-8	0.5000	100.0000	7,690	0.7690
		Epoxy Resin A	-----	1.0276	4.5000	15,809	1.5809
		Epoxy Resin B	-----	0.6851	3.0000	10,539	1.0539
		Phenol Resin	-----	1.5071	6.6000	23,186	2.3186
		Carbon Black	1333-86-4	0.1142	0.5000	1,757	0.1757
		Silica Fused	60676-86-0	19.5011	85.4000	300,017	30.0017
Package Weight (mg):				65.0001	% Total:		100.0000

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**48L – QFN 6x6x0.6mm
(Saw Version)
Pb-Free Package**

**B4. MATERIAL COMPOSITION (Note 3)
USING COPPER PALLADIUM WIRE / PURE SN FINISH**

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Lead frame	Base Material	Copper	7440-50-8	26.7200	97.5000	415,970	41.5970
		Iron	7439-89-6	0.6400	2.3500	9,963	0.9963
		Phosphorus	7723-14-0	0.0100	0.0300	156	0.0156
		Zinc	7440-66-6	0.0300	0.1200	467	0.0467
Lead Finish	External Plating	Tin	7440-31-5	0.9000	100.0000	14,011	1.4011
Die Attach	Adhesive	Phenol Resin	Trade Secret	0.1200	12.1500	1,868	0.1868
		Epoxy Resin	Trade Secret	0.1200	12.1500	1,868	0.1868
		SiO2 Filler	68611-44-9	0.0600	5.6100	934	0.0934
		(Meta)Acrylic Copolymer	Trade Secret	0.7100	70.0900	11,053	1.1053
Die	Circuit	Si	7440-21-3	3.3200	100.0000	51,685	5.1685
Wire	Interconnect	Copper	7440-50-8	1.0900	99.9800	16,969	1.6969
		Palladium	7440-05-3	0.0002	0.0200	3	0.0003
Mold Compound	Encapsulation	Epoxy Resin-A	Trade secret	0.9150	2.9986	14,244	1.4244
		Epoxy Resin-B	Trade secret	0.9150	2.9985	14,244	1.4244
		Phenol Resin	Trade secret	1.6012	5.2473	24,927	2.4927
		Carbon Black	1333-86-4	0.1220	0.3998	1,899	0.1899
		Silica fused	60676-86-0	23.7900	77.9610	370,357	37.0357
		Silica fused	76361-86-9	3.0500	9.9950	47,482	4.7482
		Silica, crystalline	14808-60-7	0.1220	0.3998	1,899	0.1899
Package Weight (mg):				64.2354		% Total:	100.0000

II. DECLARATION OF PACKAGING / INDIRECT MATERIALS

Type	Material	Lead PPM	Cadmium PPM	Cr VI PPM	Mercury PPM	PBB PPM	PBDE PPM	Analysis Report (Note2)
Tape & Reel	Cover tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-CART-R
	Plastic Reel	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-PLRL-R
Tray	Tray	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-TRAY-R
Others	Shielding bag	< 2.0	< 2.0	< 2.0	< 2.0	<5.0	<5.0	CoA-SBAG -R

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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.



Document History Page

Document Title: 48L - QFN 6X6X0.6 MM (SAW VERSION) PB- FREE PACKAGE MATERIAL
DECLARATION DATASHEET
Document Number: 001-58763

Rev.	ECN No.	Orig. of Change	Description of Change
**	2864992	HLR	New specification.
*A	2950449	HLR	Change body size 5x5x0.6mm to 6x6x06mm on the header.
*B	3135667	VFR	Added PMDD for Site 2
*C	3264886	VFR	Added PMDD for Site 3, ASE-G. Reference QTP # 112105.
*D	3456533	VFR	Added PMDD for Site 4, ASE-G Copper wire qual. Reference QTP # 114403.
*E	3533023	COPI	Added PMDD for Site 5, Autoline-RA Copper wire qual. Reference QTP # 120205.
*F	3602002	VFR	Added Table B2 for Site 4 PMDD with reference QTP # 120606 – ASEK Pure Cu Wire qualification.
*G	3903948	HLR	Updated the material composition table on Assembly Sites 1, 2 and 3 to reflect 4 decimal places on values. Removed tube material on declaration of packaging table.
*H	3981260	JVP	Added Table B3 for Site 4 PMDD with reference to QTP# 130904 – ASEK CuPd Wire Qualification using Pure Sn Finish.
*I	4063962	YUM	Added assembly site name in the assembly heading in site 1, 2 and 3. Changed Assembly code to assembly site name in site 1, 2 and 3. Consolidate material composition in one assembly site. 1. CML 2. ASET

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**48L – QFN 6x6x0.6mm
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Distribution: WEB

Posting: None

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