16L – QFN 3x3x0.6mm
Chip On Leads (Saw Version)
Pb-Free Package

PACKAGE MATERIAL DECLARATION DATASHEET

Cypress Package Code	LG	**Body Size (mil/mm)**	3x3x0.6mm
Package Weight – Site 1	B1 : 13.9899 mg B2 : 15,1901 mg	**Package Weight – Site 2**	20.5801 mg
Package Weight – Site 3	16.7999 mg	**Package Weight – Site 4**	B1 : 13.8347 mg B2 : 13.0454 mg

SUMMARY

The QFN COL 16L Pb-Free package is compliant to RoHS. Cypress Ordering Part Numbers containing an "X" (e.g. CY7C1328G-133A**X**I, CY2308S**X**C-1HT) meet the Directive 2002/95/EC (RoHS) requirement.

ASSEMBLY Site 1: Amkor Technology Philippines (P1/P2)
Package Qualification Report #063602, 104001 (See Note 1)

II. DECLARATION OF PACKAGED UNITS

II. 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-LG16-Amkor Philippines (P1/P2)
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.

B. MATERIAL COMPOSITION (Note 3)

B1 : NiPdAu with Hitachi Mold Compound

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogeneous material	PPM	% weight of substance per package
Leadframe	Base Material	Cu	7440-50-8	5.9079	98.6300%	422,297	42.2297%
		Si	7440-21-3	0.0401	0.6700%	2,869	0.2869%
		Mg	7439-95-4	0.0090	0.1500%	642	0.0642%
	Frame Plating	Ag	7440-22-4	0.0329	0.5500%	2,355	0.2355%
Lead Finish	External Plating	Ni	7440-02-0	0.1867	98.2400%	13,342	1.3342%
		Pd	7440-05-3	0.0031	1.6300%	221	0.0221%
		Au	7440-57-5	0.0002	0.1300%	18	0.0018%
Die Attach	Adhesive	Specific EpoxyResin	(Trade secret)	0.0210	15.0000%	1,501	0.1501%
		Bisphenol A Glycidylether	25068-38-6	0.0070	5.0000%	500	0.0500%
		Fused Silica	60676-86-0	0.0980	70.0000%	7,005	0.7005%
		Additive	--------------------	0.0140	10.0000%	1,001	0.1001%
Die	Circuit	Si	7440-21-3	1.1900	100.0000%	85,061	8.5061%
Wire	Interconnect	Au	7440-57-5	0.0600	100.0000%	4,289	0.4289%
Mold Compound	Encapsulation	Epoxy Resin-1	(Trade secret)	0.2568	4.0000%	18,356	1.8356%
		Epoxy Resin-2	(Trade secret)	0.1284	2.0000%	9,178	0.9178%
		Phenol resin	(Trade secret)	0.1926	3.0000%	13,767	1.3767%
		Silica Fused	60676-86-0	5.3158	82.8000%	379,969	37.9969%
		Carbon Black	1333-86-4	0.0128	0.2000%	918	0.0918%
		Metal Hydroxide	(Trade secret)	0.3210	5.0000%	22,945	2.2945%
		Others	--------------------	0.1926	3.0000%	13,767	1.3767%

Package Weight (mg): 13.9899 **% 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.

B2 : NiPdAu-Ag with Sumitomo Mold Compound

Material	Purpose of Use	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogeneous material	PPM	% weight of substance per package
Leadframe	Base Material	Cu	7440-50-8	7.0996	96.2000%	467384	46.7384%
		Si	7440-21-3	0.0480	0.6500%	3158	0.3158%
		Ni	7440-02-0	0.2214	3.0000%	14575	1.4575%
		Mg	7439-95-4	0.0111	0.1500%	729	0.0729%
Lead Finish	External Plating	Ni	7440-02-0	0.0098	97.5400%	642	0.0642%
		Pd	7440-05-3	0.0002	2.0700%	14	0.0014%
		Au-Ag	7440-57-5 7440-22-4	0.0000	0.3900	3	0.0003%
Die Attach	Adhesive	Epoxy	Proprietary	0.0300	15.0000%	1975	0.1975%
		Silica	7631-86-9	0.1400	70.0000%	9217	0.9217%
		Bisphenol	Proprietary	0.0100	5.0000%	658	0.0658%
		Additive	Proprietary	0.0200	10.0000%	1317	0.1317%
Die	Circuit	Si	7440-21-3	0.4100	100.0000%	26991	2.6991%
Wire	Interconnect	Au	7440-57-5	0.0693	99.0400%	4564	0.4564%
		Others	--------------------	0.0007	0.9600%	44	0.0044%
Mold Compound	Encapsulation	Silica Fused	60676-86-0	6.1944	87.0000%	407795	40.7795%
		Epoxy Resin	(Trade secret)	0.5340	7.5000%	35155	3.5155%
		Phenol resin	(Trade secret)	0.3560	5.0000%	23436	2.3436%
		Carbon Black	1333-86-4	0.0356	0.5000%	2344	0.2344%

Package Weight (mg): 15.1901 **% 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	<0.0005	<0.0005	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<0.0005	<0.0005	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 10.0	<50.0	<45.0	CoA-PLRL-R
Tray	Tray	< 5.0	< 0.5	< 0.16	< 0.5	-------	--------	CoA-TRAY-R
Others	Shielding bag	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	CoA-SBAG –R CoA-SBAG –M

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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 – CARSEM Malaysia
Package Qualification Report #100303 (See Note 1)

II. DECLARATION OF PACKAGED UNITS

II. 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-LG16-CARSEM
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

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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.

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
Leadframe	Base Material	Cu	7440-50-8	9.2927	95.9000%	451,541	45.1541%
		Si	7440-21-3	0.0485	0.5000%	2,354	0.2354%
		Ni	7440-02-0	0.3392	3.5000%	16,480	1.6480%
		Mg	7439-95-4	0.0097	0.1000%	471	0.0471%
Lead Finish	External Plating	Ni	7440-02-0	0.1091	90.9100%	5,301	0.5301%
		Pd	7440-05-3	0.0095	7.9100%	461	0.0461%
		Au	7440-57-5	0.0014	1.1900%	69	0.0069%
Die Attach	Adhesive	Treated silica	Proprietary	0.0024	8.0000%	117	0.0117%
		Glycol ethers	Proprietary	0.0066	22.0000%	321	0.0321%
		Metal Oxide	Proprietary	0.0093	31.0000%	452	0.0452%
		Curing agent & hardener	Proprietary	0.0024	8.0000%	117	0.0117%
		Epoxy resin	--------------------	0.0093	31.0000%	452	0.0452%
Die	Circuit	Si	7440-21-3	0.4100	100.0000%	19,922	1.9922%
Wire	Interconnect	Au	7440-57-5	0.2000	100.0000%	9,718	0.9718%
Mold Compound	Encapsulation	Silica Fused	60676-86-0	9.4918	93.7000%	461,215	46.1215%
		Epoxy Resin	(Trade secret)	0.3039	3.0000%	14,767	1.4767%
		Phenol resin	(Trade secret)	0.3039	3.0000%	14,767	1.4767%
		Carbon Black	1333-86-4	0.0304	0.3000%	1,477	0.1477%

Package Weight (mg): **20.5801** **% 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	<0.0005	<0.0005	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<0.0005	<0.0005	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 10.0	<50.0	<45.0	CoA-PLRL-R
Tray	Tray	< 5.0	< 0.5	< 0.16	< 0.5	-------	--------	CoA-TRAY-R
Others	Shielding bag	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	CoA-SBAG –R CoA-SBAG –M

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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.

ASSEMBLY Site 3: Amkor Technology Seoul Korea
Package Qualification Report 104205 (See Note 1)

II. DECLARATION OF PACKAGED UNITS

II. 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-LG16-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 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

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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.

B. MATERIAL COMPOSITION (Note 3)

Material	Purpose	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Leadframe	Base material	Copper (Cu)	7440-50-8	7.0997	96.4900%	422603	42.2603%
		Nickel (Ni)	7440-02-0	0.2001	2.7200%	11913	1.1913%
		Silicon (Si)	7440-21-3	0.0478	0.6500%	2847	0.2847%
		Magnesium (Mg)	7439-95-4	0.0103	0.1400%	613	0.0613%
Leadfinish	External Plating	Nickel (Ni)	7440-02-0	0.2162	96.9400%	12868	1.2868%
		Palladium (Pd)	7440-05-3	0.0051	2.2800%	303	0.0303%
		Gold-Silver (Au-Ag)	7440-57-5 / 7440-22-4	0.0017	0.7800%	104	0.0104%
Die Attach	Adhesive	Epoxy resin	Proprietary	0.2058	98.0000%	12250	1.2250%
		Silica	Proprietary	0.0042	2.0000%	250	0.0250%
Die	Circuit	Silicon	7440-21-3	1.8600	100.0000%	110714	11.0714%
Wire	Interconnect	Gold (Au)	7440-57-5	0.0750	100.0000%	4464	0.4464%
Mold compound	Encapsulation	Epoxy resin	Proprietary	0.5298	7.4900%	31538	3.1538%
		Phenolic resin	Proprietary	0.3502	4.9500%	20843	2.0843%
		Silica, vitreous (SiO2)	60676-86-0	6.1600	87.0800%	366669	36.6669%
		Carbon black	1333-86-4	0.0198	0.2800%	1179	0.1179%
		Bismuth compounds	Proprietary	0.0071	0.1000%	421	0.0421%
		Organic phosphorous compounds	Proprietary	0.0071	0.1000%	421	0.0421%

Package Weight (mg): **16.7999** **% 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	<0.0005	<0.0005	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<0.0005	<0.0005	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 10.0	<50.0	<45.0	CoA-PLRL-R
Tray	Tray	< 5.0	< 0.5	< 0.16	< 0.5	-------	--------	CoA-TRAY-R
Others	Shielding bag	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	CoA-SBAG –R CoA-SBAG –M

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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.

ASSEMBLY Site 4: Advanced Semiconductor Engineering Taiwan (ASET)
Package Qualification Report # 112603, 114903 (See Note 1)

II. DECLARATION OF PACKAGED UNITS

II. 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-LG16-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 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

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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.

B. MATERIAL COMPOSITION (Note 3)

B1: Gold Wire

Material	Purpose	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Leadframe	Base material	Nickel (Ni)	7440-02-0	0.1648	3.2000%	11,912	1.1912
		Silicon (Si)	7440-21-3	0.0386	0.7500%	2,792	0.2792
		Magnesium (Mg)	7439-95-4	0.0093	0.1800%	670	0.0670
		Copper (Cu)	7440-50-8	4.9378	95.8800%	356,911	35.6911
Leadfinish	External Plating	Nickel (Ni)	7440-02-0	0.1201	93.8500%	8,681	0.8681
		Palladium (Pd)	7440-05-3	0.0049	3.8400%	355	0.0355
		Gold-Silver (Au-Ag)	7440-57-5 7440-22-4	0.0030	2.3100%	214	0.0214
Die Attach	Adhesive	Epoxy Resin	64425-84-4	0.1638	12.0000%	11,843	1.1843
		Phenol Resin	Proprietary	0.1638	12.0000%	11,843	1.1843
		SiO2 Filler	Proprietary	0.0683	5.0000%	4,935	0.4935
		Acrylic copolymer	Proprietary	0.9694	71.0000%	70,072	7.0072
Die	Circuit	Silicon (Si)	7440-21-3	0.9000	100.0000%	65,053	6.5053
Wire	Interconnect	Gold (Au)	7440-57-5	0.0500	100.0000%	3,614	0.3614
Mold compound	Encapsulation	Epoxy Resin A	Proprietary	0.2808	4.5000%	20,300	2.0300
		Epoxy Resin B	Proprietary	0.1872	3.0000%	13,533	1.3533
		Phenol Resin	Proprietary	0.4119	6.6000%	29,773	2.9773
		Carbon Black	1333-86-4	0.0312	0.5000%	2,256	0.2256
		Silica Fused	60676-86-0	5.3298	85.4000%	385,244	38.5244

Package Weight (mg): **13.8347** **% Total:** **100.0000**

Note 1: Qualification reports are available at www.cypress.com. Access them by doing a Search on the Report #.
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Note 4: Actual testing performed on package family basis. Engineering calculations were applied to derive individual package data.

B2: Copper Wire

Material	Purpose	Substance Composition	CAS Number	Weight by mg	% weight of substance per Homogenous material	PPM	% weight of substance per package
Leadframe	Base material	Nickel	7440-02-0	0.1648	3.1997%	12630	1.2630%
		Silicon	7440-21-3	0.0386	0.7499%	2960	0.2960%
		Magnesium	7439-95-4	0.0093	0.1800%	710	0.0710%
		Copper	7440-50-8	4.9369	95.8704%	378438	37.8438%
Leadfinish	External Plating	Gold	7440-57-5	0.0030	2.3485%	230	0.0230%
		Palladium	7440-05-3	0.0050	3.9379%	386	0.0386%
		Nickel	7440-02-0	0.1198	93.7136%	9185	0.9185%
		Silver	7440-22-4	0.0000	0.0000%	0	0.0000%
Die Attach	Adhesive	Epoxy Resin	64425-84-4	0.0468	12.0000%	3587	0.3587%
		Phenol Resin	Trade Secret	0.0468	12.0000%	3587	0.3587%
		SiO2 Filler	Trade Secret	0.0195	5.0000%	1495	0.1495%
		Acrylic Copolymer	Trade Secret	0.2769	71.0000%	21226	2.1226%
Die	Circuit	Si	7440-21-3	1.5280	100.0000%	117130	11.7130%
Wire	Interconnect	Copper	7440-50-8	0.0200	100.0000%	1533	0.1533%
Mold compound	Encapsulation	Epoxy Resin A	Trade secret	0.2624	4.5000%	20111	2.0111%
		Epoxy Resin B	Trade secret	0.1749	3.0000%	13407	1.3407%
		Phenol Resin	Trade secret	0.3848	6.6000%	29496	2.9496%
		Carbon Black	1333-86-4	0.0292	0.5000%	2235	0.2235%
		Silica Fused	60676-86-0	4.9788	85.4000%	381654	38.1654%

Package Weight (mg): 13.0454 **% 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	<0.0005	<0.0005	CoA-COVT-R
	Carrier tape	< 2.0	< 2.0	< 2.0	< 2.0	<0.0005	<0.0005	CoA-CART-R
	Plastic Reel	< 5.0	< 5.0	< 5.0	< 10.0	<50.0	<45.0	CoA-PLRL-R
Tray	Tray	< 5.0	< 0.5	< 0.16	< 0.5	-------	--------	CoA-TRAY-R
Others	Shielding bag	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	CoA-SBAG –R CoA-SBAG –M

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.

Document History Page

Document Title: 16L - QFN 3X3X0.6MM CHIP ON LEADS (SAW VERSION) PB-FREE PACKAGE MATERIAL DECALARATION DATASHEET
Document Number: 001-11888

Rev.	**ECN No.**	**Orig. of Change**	**Description of Change**
**	602896	EBZ	Initial spec release.
*A	2741730	MAHA Dcon	Corrected the package weight of assembly site 1 on page 1. Corrected the following data on the material composition table of assembly site 1: a. Weight by mg b. % weight of substance per Homogeneous material c. % weight of substance per package d. Package weight Change CML to WEB in distribution list.
*B	2889372	EBZ	Included additional assembly site Carsem Malaysia (CA) Corrected title in the document history page to match the title in the header.
*C	3072300	JSO	Included assembly site #3 Added B2
*D	3103478	NKZ	Corrected Material Composition in Assembly 3.
*E	3210958	MAHA	Corrected the QTP number of assembly site 2 from 0100303 to 100303.
*F	3260116	VFR	Added QTP # 104903 to Assembly Site 3
*G	3304831	VFR	Added PMDD for Site 4.
*H	3422772	HLR	Updated the material composition table for Assembly Sites 1 to 4 to reflect 4 decimal places on values.
*I	3464531	EBZ	Added QTP # 114903 to Assembly Site 4. Added package weight B2 for Site 4. Added B1 Gold Wire for Material Composition table for Site-4. Added Material Composition table B2 Copper Wire for Site-4
*J	4052625	YUM	Added assembly site name in the Assembly heading in site 1, 2, 3 and 4. Changed Assembly code to Assembly site name in site 1, 2, 3 and 4. Removed entire Tube row in the Indirect materials section.

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

Distribution: WEB

Posting: None

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