Contents

1 Purpose and Scope

1.1 Purpose

To document the materials composition declaration for 4QFN packages for SiT160x/ SiT5008/SiT8008/SiT8009/SiT1618/SiT89xx products manufactured from Carsem and UTAC.

1.2 Scope

Products covered: SiT1602, SiT1603, SiT1604, SiT8008, SiT8009, SiT1618, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924 and SiT8925 in 4QFN 2.0 mm x 1.6 mm, 2.5 mm x 2.0 mm, 3.2 mm x 2.5 mm, 5.0 mm x 3.2 mm, and 7.0 mm x 5.0 mm packages and SiT5008 in 2.0 mm x 1.6 mm, 2.5 mm x 2.0 mm packages.

2 Reference Documents

2.1 EU RoHS Directive 2002/95/EC and amendments

2.2 Internal References

2.2.1 QI-1 SiTime green partner and RoHS/Green Compliance

2.2.2 QI-73 RoHS Certificate for Homogeneous Materials in QFN Packages

2.2.3 QI-21 RoHS Certificate for CMOS die TSMC

2.2.4 QI-77 RoHS Certificate for MEMS die Bosch

3 Material Composition Declaration

3.1 The components (homogeneous materials) contained in the 4QFN packages used for SiT160x/SiT5008/SiT8008/SiT8009/SiT1618/SiT89xx Products are declared in the tables listed below. It should be noted that contents declared are from engineering estimates based on the MSDS as reference and material C of C provided by the material vendors and it is expected to have rounding errors. Engineering judgment/estimation based on part construction (generic or actual product) is used for the MCD table determination. Therefore, the amount and percentages shown in MCD table given in this document should not be compared with MSDS content. Main purpose of MSDS is for safety declaration of the material. Insignificant amount (<0.001 mg) may not be reported if total content is <1000 ppm.

3.2 As per industry standard practice (JEDEC Standard JESD46 and customer Green Partner requirements, such as Sony Green Program) the information provided in this document will be updated only when any change in the material content is implemented. Revised document will be uploaded to SiTime website. Annual update, when there is no change to the material content, is not necessary.

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Table 1:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT5008, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925

4L QFN 2.5 mm x 2.0 mm PACKAGE TABLE OF MATERIAL DECLARATION – UTAC

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt % of Component	Element wt % of Package
1	Leadframe	C194 Alloy	3.4490	Copper	7440-50-8	3.364	97.54	32.09
				Iron	7439-89-6	0.081	2.35	0.77
				Zinc	7440-66-6	0.004	0.12	0.04
1a	Plating	NiPdAu	0.0480	Nickel	7440-02-0	0.046	95.83	0.44
				Palladium	7440-05-3	0.001	2.08	0.0095
				Gold	7440-57-5	0.001	2.08	0.0095
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	4.77
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.38
4	Die attach material 1	Non-Conductive epoxy	0.2560	Bisphenol A Liquid Epoxy Resin	25068-38-6	0.02960	11.56	0.28
				Specific Epoxy Resin	Trade secret	0.01350	5.27	0.13
				Hardener	Trade secret	0.00270	1.05	0.026
				Silica	7631-86-9	0.20210	78.95	1.93
				Additives	Trade Secret	0.0081	3.16	0.077
5	Die attach material 2	Conductive epoxy	0.02202	Silver	7440-22-4	0.0170	77.20	0.16
				exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl methacrylate	7534-94-3	0.00330	14.99	0.031
				1,1'-(1,3-phenylene) bis-1H-pyrrole-2,5-dione	3006-93-7	0.00090	4.09	0.0086
				Epoxy resin	Proprietary	0.00040	1.82	0.0038
				2-(3,4-Epoxycyclohexyl)	3388-04-3	0.00040	1.82	0.0038
				2-Methylhydroquinone	95-71-6	0.000020	0.09	0.00019
6	Wire	Gold	0.10	Au	7440-57-5	0.10	100.00	0.95
7	Encapsulation	Epoxy Resin	6.0690	Fused silica	60676-86-0	5.493	90.51	52.39
				Epoxy resin	Proprietary	0.285	4.70	2.72
				Phenol resin	Proprietary	0.285	4.70	2.72
				Carbon black	1333-86-4	0.006	0.10	0.057
	Total Package Weight, mg:		10.48402					

Table 2:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 3.2 mm x 2.5 mm PACKAGE TABLE OF MATERIAL DECLARATION – UTAC

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt % of Component	Element wt % of Package
1	Leadframe	C194 Alloy	5.00500	Copper	7440-50-8	4.88100	97.52	29.03
				Iron	7439-89-6	0.11800	2.36	0.70
				Zinc	7440-66-6	0.00600	0.12	0.04
1a	Plating	NiPdAu	0.06800	Nickel	7440-02-0	0.06500	95.59	0.39
				Palladium	7440-05-3	0.00200	2.94	0.01
				Gold	7440-57-5	0.00100	1.47	0.01
2	Die 1	CMOS Die	0.50000	Si	7440-21-3	0.50000	100.00	2.97
3	Die 2	MEMS Die	0.04000	Si	7440-21-3	0.04000	100.00	0.24
4	Die attach material 1	Non-Conductive epoxy	0.25600	Bisphenol A Liquid Epoxy Resin	25068-38-6	0.02960	11.56	0.18
				Specific Epoxy Resin	Trade secret	0.01350	5.27	0.08
				Hardener	Trade secret	0.00270	1.05	0.02
				Silica	7631-86-9	0.20210	78.95	1.20
				Additives	Trade Secret	0.00810	3.16	0.05
5	Die attach material 2	Conductive epoxy	0.02202	Silver	7440-22-4	0.01700	77.20	0.101
				exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl methacrylate	7534-94-3	0.00330	14.99	0.020
				1,1'-(1,3-phenylene) bis-1H-pyrrole-2,5-dione	3006-93-7	0.00090	4.09	0.005
				Epoxy resin	Proprietary	0.00040	1.82	0.0024
				2-(3,4-Epoxycyclohexyl) ethyltrimethoxysilane	3388-04-3	0.00040	1.82	0.0024
				2-Methylhydroquinone	95-71-6	0.00002	0.09	0.00012
6	Wire	Gold	0.10800	Au	7440-57-5	0.10800	100.00	0.64
7	Encapsulation	Epoxy Resin	10.81700	Fused silica	60676-86-0	9.78900	90.50	58.21
				Epoxy resin	Trade secret	0.50800	4.70	3.02
				Phenol resin	Trade secret	0.50800	4.70	3.02
				Carbon black	1333-86-4	0.01200	0.11	0.07
	Total Package Weight, mg:		16.81602					

Table 3:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 5.0 mm x 3.2 mm PACKAGE TABLE OF MATERIAL DECLARATION – UTAC

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt % of Component	Element wt % of Package
1	Leadframe	C194 Alloy	12.5820	Copper	7440-50-8	12.270	97.52	36.70
				Iron	7439-89-6	0.297	2.36	0.89
				Zinc	7440-66-6	0.015	0.12	0.04
1a	Plating	NiPdAu	0.0060	Nickel	7440-02-0	0.0057	95.51	0.02
				Palladium	7440-05-3	0.00018	3.02	0.00054
				Gold	7440-57-5	0.000088	1.47	0.00026
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.50	100.00	1.50
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.12
4	Die attach material 1	Non-Conductive epoxy	0.2560	Bisphenol A Liquid Epoxy Resin	25068-38-6	0.02960	11.56	0.09
				Specific Epoxy Resin	Trade secret	0.01350	5.27	0.04
				Hardener	Trade secret	0.00270	1.05	0.01
				Silica	7631-86-9	0.20210	78.95	0.60
				Additives	Trade Secret	0.0081	3.16	0.02
5	Die attach material 2	Conductive epoxy	0.02202	Silver	7440-22-4	0.0170	77.20	0.051
				exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl methacrylate	7534-94-3	0.00330	14.99	0.010
				1,1'-(1,3-phenylene) bis-1H-pyrrole-2,5-dione	3006-93-7	0.00090	4.09	0.003
				Epoxy resin	Proprietary	0.00040	1.82	0.0012
				2-(3,4-Epoxycyclohexyl) ethyltrimethoxysilane	3388-04-3	0.00040	1.82	0.0012
				2-Methylhydroquinone	95-71-6	0.000020	0.09	0.00006
6	Wire	Gold	0.1080	Au	7440-57-5	0.1080	100.00	0.32
7	Encapsulation	Epoxy Resin	19.9190	Fused silica	60676-86-0	18.027	90.50	53.92
				Epoxy resin	Trade secret	0.936	4.70	2.80
				Phenol resin	Trade secret	0.936	4.70	2.80
				Carbon black	1333-86-4	0.020	0.10	0.06
	Total Package Weight, mg		33.432988					

Table 4:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 7.0 mm x 5.0 mm PACKAGE TABLE OF MATERIAL DECLARATION – UTAC

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt % of Component	Element wt % of Package
1	Leadframe	C194 Alloy	32.7760	Copper	7440-50-8	31.96300	97.52	41.09
				Iron	7439-89-6	0.77400	2.36	0.99
				Zinc	7440-66-6	0.03900	0.12	0.05
1a	Plating	NiPdAu	0.4510	Nickel	7440-02-0	0.43000	95.34	0.55
				Palladium	7440-05-3	0.01400	3.10	0.02
				Gold	7440-57-5	0.00700	1.55	0.01
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.50000	100.00	0.64
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.04000	100.00	0.05
4	Die attach material 1	Non-Conductive epoxy	0.2560	Bisphenol A Liquid Epoxy Resin	25068-38-6	0.02960	11.56	0.04
				Specific Epoxy Resin	Trade secret	0.01350	5.27	0.02
				Hardener	Trade secret	0.00270	1.05	0.003
				Silica	7631-86-9	0.20210	78.95	0.26
				Additives	Trade Secret	0.00810	3.16	0.01
5	Die attach material 2	Conductive epoxy	0.02202	Silver	7440-22-4	0.01700	77.20	0.022
				exo-1,7,7-trimethylbicyclo [2.2.1]hept-2-yl methacrylate	7534-94-3	0.00330	14.99	0.004
				1,1'-(1,3-phenylene) bis-1H-pyrrole-2,5-dione	3006-93-7	0.00090	4.09	0.001
				Epoxy resin	Proprietary	0.00040	1.82	0.0005
				2-(3,4-Epoxycyclohexyl) ethyltrimethoxysilane	3388-04-3	0.00040	1.82	0.0005
				2-Methylhydroquinone	95-71-6	0.00002	0.09	0.00003
6	Wire	Gold	0.4660	Au	7440-57-5	0.46600	100.00	0.60
7	Encapsulation	Epoxy Resin	43.2850	Fused silica	60676-86-0	39.17400	90.50	50.35
				Epoxy resin	Trade secret	2.03400	4.70	2.61
				Phenol resin	Trade secret	2.03400	4.70	2.61
				Carbon black	1333-86-4	0.04300	0.10	0.06
	Total Package Weight, mg		77.796020					

Table 5:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT5008, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925

4L QFN 2.0 mm x 1.6 mm PACKAGE TABLE OF MATERIAL DECLARATION – UTAC

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt % of Component	Element wt % of Package
1	Leadframe	C194 Alloy	1.90400	Copper	7440-50-8	1.85700	97.53	26.64
				Iron	7439-89-6	0.04500	2.36	0.65
				Zinc	7440-66-6	0.00200	0.11	0.03
1a	Plating	NiPdAu	0.02740	Nickel	7440-02-0	0.02600	94.89	0.37
				Palladium	7440-05-3	0.00100	3.65	0.01
				Gold	7440-57-5	0.00040	1.46	0.01
2	Die 1	CMOS Die	0.50000	Si	7440-21-3	0.50000	100.00	7.17
3	Die 2	MEMS Die	0.04000	Si	7440-21-3	0.04000	100.00	0.57
4	Die attach material 1	Non-Conductive epoxy	0.25600	Bisphenol A Liquid Epoxy Resin	25068-38-6	0.02960	11.56	0.42
				Specific Epoxy Resin	Trade secret	0.01350	5.27	0.19
				Hardener	Trade secret	0.00270	1.05	0.04
				Silica	7631-86-9	0.20210	78.95	2.90
				Additives	Trade Secret	0.00810	3.16	0.12
5	Die attach material 2	Conductive epoxy	0.02202	Silver	7440-22-4	0.01700	77.20	0.244
				exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate	7534-94-3	0.00330	14.99	0.047
				1,1'-(1,3-phenylene) bis-1H-pyrrole-2,5-dione	3006-93-7	0.00090	4.09	0.013
				Epoxy resin	Proprietary	0.00040	1.82	0.0057
				2-(3,4-Epoxycyclohexyl) ethyltrimethoxysilane	3388-04-3	0.00040	1.82	0.0057
				2-Methylhydroquinone	95-71-6	0.00002	0.09	0.00029
6	Wire	Gold	0.05400	Au	7440-57-5	0.05400	100.00	0.77
7	Encapsulation	Epoxy Resin	4.16600	Fused silica	60676-86-0	3.77000	90.49	54.09
				Epoxy resin	Trade secret	0.19600	4.70	2.81
				Phenol resin	Trade secret	0.19600	4.70	2.81
				Carbon black	1333-86-4	0.00400	0.10	0.06
	Total Package Weight, mg:		6.96942					

Table 6:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT5008, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925

4L QFN 2.5 mm x 2.0 mm PACKAGE TABLE OF MATERIAL DECLARATION – Carsem

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt% of Component	Element wt % of Package
1	Leadframe	C194	3.1680	Copper	7440-50-8	3.095	97.70	30.52
				Iron	7439-89-6	0.069	2.18	0.68
				Zinc	7440-66-6	0.004	0.12	0.04
1a	Plating	NiPdAu	0.0420	Nickel	7440-02-0	0.038	90.48	0.37
				Palladium	7440-05-3	0.003	7.14	0.03
				Gold	7440-57-5	0.001	2.38	0.01
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	4.93
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.39
4	Die attach material 1	Non-Conductive epoxy	0.080	Treated silica/Metal Oxides	Proprietary	0.035	43.75	0.35
				Epoxy resin	Proprietary	0.021	26.25	0.21
				Glycol ethers	Proprietary	0.020	25.00	0.20
				Additives	Proprietary	0.004	5.00	0.04
5	Die attach material 2	Conductive epoxy	0.010	Silver	7440-22-4	0.007	70.00	0.07
				Acrylate/Resin	Proprietary	0.002	20.00	0.02
				Additive	Proprietary	0.001	10.00	0.01
6	Wire	Gold	0.050	Au	7440-57-5	0.050	100.00	0.49
7	Encapsulation	Epoxy Resin	6.250	Silica Fused	60676-86-0	5.784	92.54	57.04
				Phenol Resin	Proprietary	0.228	3.65	2.25
				Epoxy resin	Proprietary	0.219	3.50	2.16
				Carbon Black	1333-86-4	0.019	0.30	0.19
	Total Package Weight, mg:		10.140					

Table 7:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 3.2 mm x 2.5 mm PACKAGE TABLE OF MATERIAL DECLARATION – Carsem

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt% of Component	Element wt % of Package
1	Leadframe	C194	5.4480	Copper	7440-50-8	5.323	97.71	32.26
				Iron	7439-89-6	0.118	2.17	0.72
				Zinc	7440-66-6	0.007	0.12	0.04
1a	Plating	NiPdAu	0.0720	Nickel	7440-02-0	0.065	90.28	0.39
				Palladium	7440-05-3	0.006	8.33	0.04
				Gold	7440-57-5	0.001	1.39	0.01
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	3.03
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.24
4	Die attach material 1	Non-Conductive epoxy	0.080	Treated silica/Metal Oxides	Proprietary	0.035	43.75	0.21
				Epoxy resin	Proprietary	0.021	26.25	0.13
				Glycol ethers	Proprietary	0.020	25.00	0.12
				Additives	Proprietary	0.004	5.00	0.02
5	Die attach material 2	Conductive epoxy	0.010	Silver	7440-22-4	0.007	70.00	0.04
				Acrylate/Resin	Proprietary	0.002	20.00	0.01
				Additive	Proprietary	0.001	10.00	0.01
6	Wire	Gold	0.050	Au	7440-57-5	0.050	100.00	0.30
7	Encapsulation	Epoxy Resin	10.30	Silica Fused	60676-86-0	9.532	92.54	57.77
				Phenol Resin	Proprietary	0.376	3.65	2.28
				Epoxy resin	Proprietary	0.361	3.50	2.19
				Carbon Black	1333-86-4	0.031	0.30	0.19
	Total Package Weight, mg:		16.50					

Table 8:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 5.0 mm x 3.22 mm PACKAGE TABLE OF MATERIAL DECLARATION – Carsem

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt% of Component	Element wt % of Package
1	Leadframe	C194	10.7780	Copper	7440-50-8	10.531	97.71	32.02
				Iron	7439-89-6	0.234	2.17	0.71
				Zinc	7440-66-6	0.013	0.12	0.04
1a	Plating	NiPdAu	0.1420	Nickel	7440-02-0	0.128	90.14	0.39
				Palladium	7440-05-3	0.012	8.45	0.04
				Gold	7440-57-5	0.002	1.41	0.01
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	1.52
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.12
4	Die attach material 1	Non-Conductive epoxy	0.080	Treated silica/Metal Oxides	Proprietary	0.035	43.75	0.11
				Epoxy resin	Proprietary	0.020	25.00	0.06
				Glycol ethers	Proprietary	0.004	5.00	0.01
				Additives	Proprietary	0.021	26.25	0.06
5	Die attach material 2	Conductive epoxy	0.010	Silver	7440-22-4	0.007	70.00	0.02
				Acrylate/Resin	Proprietary	0.002	20.00	0.01
				Additive	Proprietary	0.001	10.00	0.003
6	Wire	Gold	0.050	Au	7440-57-5	0.050	100.00	0.15
7	Encapsulation	Epoxy Resin	21.290	Silica Fused	60676-86-0	19.703	92.55	59.91
				Phenol Resin	Proprietary	0.777	3.65	2.36
				Epoxy resin	Proprietary	0.746	3.50	2.27
				Carbon Black	1333-86-4	0.064	0.30	0.19
	Total Package Weight, mg:		32.890					

Table 9:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT5008, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925

4L QFN 2.0 mm x 1.6 mm PACKAGE TABLE OF MATERIAL DECLARATION – Carsem

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt% of Component	Element wt % of Package
1	Leadframe	C194	2.5070	Copper	7440-50-8	2.450	97.73	35.66
				Iron	7439-89-6	0.054	2.15	0.79
				Zinc	7440-66-6	0.003	0.12	0.04
1a	Plating	NiPdAu	0.0330	Nickel	7440-02-0	0.030	90.91	0.44
				Palladium	7440-05-3	0.002	6.06	0.03
				Gold	7440-57-5	0.001	3.03	0.01
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	7.28
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.58
4	Die attach material 1	Non-Conductive epoxy	0.080	Treated silica/Metal Oxides	Proprietary	0.035	43.75	0.51
				Epoxy resin	Proprietary	0.021	26.25	0.31
				Glycol ethers	Proprietary	0.020	25.00	0.29
				Additives	Proprietary	0.004	5.00	0.06
5	Die attach material 2	Conductive epoxy	0.010	Silver	7440-22-4	0.007	70.00	0.10
				Acrylate/Resin	Proprietary	0.002	20.00	0.03
				Additive	Proprietary	0.001	10.00	0.01
6	Wire	Gold	0.050	Au	7440-57-5	0.050	100.00	0.73
7	Encapsulation	Epoxy Resin	3.650	Silica Fused	60676-86-0	3.378	92.55	49.17
				Phenol Resin	Proprietary	0.133	3.64	1.94
				Epoxy resin	Proprietary	0.128	3.51	1.86
				Carbon Black	1333-86-4	0.011	0.30	0.16
	Total Package Weight, mg:		6.870					

Table 10:
Base Products –
SiT1602, SiT1603, SiT1604, SiT1618, SiT8008, SiT8009, SiT8918, SiT8919, SiT8920, SiT8921, SiT8924, SiT8925, SiT8944, SiT8945

4L QFN 7.0 mm x 5.0 mm PACKAGE TABLE OF MATERIAL DECLARATION – Carsem

No.	Name of the Component	Material Type	Component Weight, mg	Materials Anallysis (element)	CAS Number	Element Weight, mg	Element wt% of Component	Element wt % of Package
1	Leadframe	C194	23.020	Copper	7440-50-8	22.492	97.71	27.34
				Iron	7439-89-6	0.499	2.17	0.61
				Zinc	7440-66-6	0.029	0.12	0.04
1a	Plating	NiPdAu	0.30320	Nickel	7440-02-0	0.274	90.37	0.33
				Palladium	7440-05-3	0.025	8.25	0.03
				Gold	7440-57-5	0.004	1.32	0.00
2	Die 1	CMOS Die	0.50	Si	7440-21-3	0.500	100.00	0.61
3	Die 2	MEMS Die	0.040	Si	7440-21-3	0.040	100.00	0.05
4	Die attach material 1	Non-Conductive epoxy	0.080	Treated silica/Metal Oxides	Proprietary	0.035	43.75	0.04
				Epoxy resin	Proprietary	0.021	26.25	0.03
				Glycol ethers	Proprietary	0.020	25.00	0.02
				Additives	Proprietary	0.004	5.00	0.00
5	Die attach material 2	Conductive epoxy	0.010	Silver	7440-22-4	0.007	70.00	0.01
				Acrylate/Resin	Proprietary	0.003	30.00	0.00
				Additive	Proprietary	0.000	0.00	0.000
6	Wire	Gold	0.130	Au	7440-57-5	0.130	100.00	0.16
7	Encapsulation	Epoxy Resin	58.190	Silica Fused	60676-86-0	53.852	92.55	65.46
				Phenol Resin	Proprietary	2.125	3.65	2.58
				Epoxy resin	Proprietary	2.038	3.50	2.48
				Carbon Black	1333-86-4	0.175	0.30	0.21
	Total Package Weight, mg:		82.27320					

Revision History

Table 11: Revision History

Version	Description of Change	Reason for Change
A00	Initial Release	Created new document with Composition declaration tables for SiT1602 products in 4QFN packages.
A01	Added Table-3 to Table-14	The below package sizes are available for SiT1602 product family: package size 2016, 2520, 3225, and 7050 from Carsem and UTAC; and 2520, 3225, 5032 and 7050 from ASE
A02	Revised sec1.2 and Table-1 to Table-14	Added SiT1618, SiT8918, SiT8920, and SiT8924
A03	Revised document title	To clarify the product applicability of the document; customer request
A04	Revised sec. 2.2.1	Typo in document name.
A05	Edited sections 2.2.3, 2.2.4	Typo in documents' name.
A06	Edited Table 1 – Table 5	Edited according to the new revision from UTAC
A07	Updated parts list	Added SiT8944, SiT8945
A08	Updated parts list	Deleted SiT8944, SiT8945. Added SiT5008 for 2016 and 2520 package sizes.
A09	Formatting update	Formatting changes, Disclaimer changed

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