

Adesto Technologies - Package Material Declaration Data Sheet			
Package Code	8MA3	GPC	YCQ
Package Description	8-Pad, 2 x 3 x 0.6 mm Body, 1.6 x 0.2 mm Exposed Pad, Plastic Ultra Thin Dual Flat No-Lead Package (UDFN/USON)		
Lead Finish	Nickel-Palladium-Gold (NiPdAu)	J-STD-609 Category	e4
RoHS Compliant	Yes	Green Compliant	Yes
MSL Rating	1	Max Reflow Temperature	+260c
Assembly Location	External Manufacturing		

Package Material Declaration					
Material	Substance	CAS #	Weight (mg)	Package	
				Percentage	ppm
Leadframe	Copper (Cu)	7440-50-8	1.125	14.84	148401
	Iron (Fe)	7439-89-6	0.028	0.37	3694
	Phosphorous (P)	7723-14-0	0.001	0.01	132
	Zinc (Zn)	7440-66-6	0.001	0.01	132
Integrated Circuit	Silicon (Si)	7440-21-3	1.239	16.34	163439
Die Attach	silver (Ag)	7440-22-4	0.070	0.92	9234
	2-Propionic Acid, Methyl Ester Reason Products	Proprietary	0.017	0.22	2243
	Dicyclopentenloxyethyl Methacrylate	68586-19-6	0.004	0.05	528
	Bis (alpha, alpha-Dimethylbenzyl) Peroxide	80-43-3	0.000	0.01	53
Die Pad Plating	silver (Ag)	7440-22-4	0.041	0.54	5408
Bond Wire	Gold (Au)	7440-57-5	0.048	0.63	6332
Encapsulation	Silica	60676-86-0	4.232	55.83	558252
	Metal Hydroxide	Proprietary	0.284	3.75	37463
	Epoxy Resin - 1	Proprietary	0.180	2.37	23744
	Phenol Resin	Proprietary	0.180	2.37	23744
	Epoxy Resin - 2	Proprietary	0.105	1.39	13851
	Carbon Black	1333-86-4	0.010	0.13	1319
Terminal Plating	Nickel (Ni)	7440-02-0	0.014	0.18	1847
	Palladium (Pd)	7440-05-3	0.001	0.01	132
	Gold (Au)	7440-57-5	0.000	0.01	53
Total			7.581	100.00	1000000

Adesto Technologies certifies that the material content information provided above is representative and accurate as of the date of this declaration. Adesto Technologies products designated as "RoHS Compliant" or "Green" (defined below) do not exceed the threshold limits of the European Union Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU, and the China Administration on Control of Pollution by Electronic Information Products (China RoHS).

Adesto Technologies has taken commercially reasonable steps to provide representative and accurate information, but may not have conducted chemical analysis or destructive testing on incoming materials. Adesto Technologies and its suppliers consider certain information to be proprietary and thus CAS numbers and other limited information may not be available for release. Adesto Technologies accepts no duty to notify or update users of any changes made to this declaration. Adesto Technologies standard Terms and Conditions apply to the representations provided herein unless otherwise provided by a written contract or other agreement signed by both parties.

Restriction on Use of Hazardous Substances ("RoHS")	
RoHS Restricted Substances	Threshold, Homogeneous Level
Cadmium (Cd)	< 100 ppm
Hexavalent Chromium (CrVI)	< 1000 ppm
Lead (Pb)	< 1000 ppm
Mercury (Hg)	< 1000 ppm
Polybrominated Biphenyls (PBBs)	< 1000 ppm
Polybrominated Diphenyl Ethers (PBDEs)	< 1000 ppm
Halogen Free Specifications (IEC 61249-2-21, JPCA-ES01 2003, IPC 4101)	
Halogen Restricted Substances	Threshold, Homogeneous Level
Chlorine (Cl)	< 900 ppm
Bromine (Br)	< 900 ppm
Total concentration of Bromine (Br) + Chlorine (Cl)	< 1500 ppm