

Material Data Declaration Sheet - v003

Schema Database Version: IEC 62474 X6.01
Substance Database Version: IEC 62474 D17.00



Supplier Information

Company Name *	Intel Corporation
Response Document ID	51338
Company Unique ID	047897855
Unique ID Authority	Dun and Bradstreet
Response Date *	2019-07-25

Contact Name *	Larson, Shane P
Contact Title *	Intel Product Ecology
Contact Phone *	1-800-628-8686
Contact Email *	productecology@intel.com

Supplier Comments <http://qdms.intel.com> - Intel certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Intel completes this form. Intel acknowledges that Customer will rely on this certification in determining the compliance of its products. Customer acknowledges that Intel may have relied on information provided by others in completing this form, and that Intel may not have independently verified such information. However, in situations where Intel has not independently verified information provided by others, Intel agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Customer and the Intel enter into a written agreement with respect to the identified part(s), 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 Intel's liability and the Customer's remedies for issues that arise regarding information the Intel provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Intel's Standard Terms and Conditions of Sale applicable to such part shall apply.

Product(s)

Product Family Name: GEMINILAKE

Requester Item Number	Item Number *	Description	Effective Date *	Mass *	UoM*	Comment
	FH806800306744xS	FH806800306744xS	2019-07-25	5.80	g	

Declaration

LHPLA	This product is Low Halogen (Components): Applies only to brominated and chlorinated flame retardants (BFRs/CFRs) and PVC in the final product. The replacement of halogenated flame retardants may not be better for the environment. Intel Components as well as purchased components on the finished assembly meet the joint JEDEC/ECA JS-709B requirement.	True
PVC	This product does not contain PVC	True
SVHC	Product Contains REACH SVHC above .1% of article	False
RoHS.Compliant	Product is compliant with EU RoHS Directive 2 2011/65/EU (Directive 2011/65/EU) and its amendments (e.g. 2015/863/EU)	True

Signature

Intel Product
Ecology

C=US, E=productecology@intel.com, OU="", O=Intel Corporation, CN=Intel Product Ecology

Part ID	Description	# of Units	Part Mass %
FH806800306744xS	FH806800306744xS	1	100.00

RoHS

Homogenous Material Name	Material Class ID	HM Mass %	Substance Group	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass % of HM	Exemption	Comments
			Benzyl butyl phthalate (BBP)	All	0.1 mass% in homogenous material	false			
			Bis (2-ethylhexyl)phthalate	All	0.1 mass% in homogenous material	false			
			Cadmium/Cadmium compounds	All, except batteries	0.01 mass% of total Cd in homogenous	false			
			Chromium (VI) Compounds	All	0.1 mass% of total Cr+6 in homogenous	false			
			Dibutyl phthalate (DBP)	All	0.1 mass% in homogenous material	false			
			Diisobutyl phthalate	All	0.1 mass% in homogenous material	false			
			Lead/Lead Compounds	All, except for: 1. batteries, 2. surface	0.1 mass% of total Pb in homogenous	false			
			Mercury/Mercury Compounds	All, except batteries	Intentionally Added or 0.1 mass% of total	false			
			Polybrominated Biphenyls (PBBs)	All	0.1 mass% in homogenous material	false			
			Polybrominated Diphenylethers (PBDEs)	All	0.1 mass% in homogenous material	false			

Low Halogen

Homogenous Material Name	Material Class ID	HM Mass %	Substance Group	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass % of HM	Comments
			Brominated flame retardants (other than	Printed wiring board laminate	0.09 mass% total bromine content in	false		
			Brominated flame retardants (other than	Plastic materials except printed wiring board	0.1 mass% of bromine in plastic	false		
			Chlorinated Flame Retardants (CFR)	Plastic materials except printed wiring board	0.1 mass% chlorine in plastic materials	false		
			Chlorinated Flame Retardants (CFR)	Printed Wiring Board (PWB) Laminates	0.09 mass% total chlorine content in	false		
	M-012		PVC			false		

Other Declarable Substances

Substance Group	Substance	CAS #	Reportable Application	Reporting Threshold	Above Threshold? (T/F)	Substance Mass (% of Article)	Comments
1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropent			All	0.1 mass% of article	false		
4-Nonylphenol, branched and linear, ethoxylated			All	0.1 mass% of article	false		
Alkanes, C10-13, chloro (Short Chain Chlorinated			All	Intentionally added or 0.1 mass% of article	false		

Aluminosilicate Refractory Ceramic			All	0.1 mass% of article	false		
Asbestos			All	Intentionally added	false		
Cadmium/Cadmium compounds			Batteries	0.001% by weight of battery	false		
Dibutyltin (DBT) compounds			All	0.1 mass% of tin in the part	false		
Diocetyl tin (DOT) compounds			(a) textile and leather articles intended to come	0.1 mass% of tin in the part	false		
Disodium tetraborates			All	0.1 mass% of article	false		
Fluorinated Greenhouse Gases (PFC, SF6, HFC)			All	Intentionally Added	false		
Hexabromocyclododecane (HBCDD)			All	Intentionally added or 0.01 mass% of article	false		
Hexahydromethylphthalic anhydride			All	0.1 mass% of article	false		
Lead/Lead Compounds			Consumer products designed or intended	0.01 mass%	false		
Lead/Lead Compounds			Batteries	0.004 mass% of battery	false		
Mercury/Mercury Compounds			Batteries	Intentionally added or 0.0001 mass% of battery	false		
Nickel/Nickel Compounds			All, where prolonged skin contact is expected	Intentionally Added	false		
Nonadecafluorodecanoic acid (PFDA) and its			All	0.1 mass% of article	false		
Ozone Depleting Substances (CFC, Halon,			All	Intentionally Added	false		
Perchlorates			All	6 x 10 ⁻⁷ mass% of battery or product part	false		
Perfluorohexane-1-sulphonic acid and its salts			All	0.1 mass% of article	false		
Perfluorononane-1-oic acid and its sodium and			All	0.1 mass% of article	false		
Polychlorinated Biphenyls (PCBs) and			All	Intentionally added	false		
Polychlorinated Naphthalenes (PCNs)			All	Intentionally added	false		
Radioactive substances			All	Intentionally added	false		
Tri-substituted organostannic			All	Intentionally added or 0.1 mass% of tin in the part	false		
Zirconia Aluminosilicate Refractory Ceramic			All	0.1 mass% of article	false		
	[Phthalato(2-)]dioxotrilead	69011-06-9	All	0.1 mass% of article	false		0.00
	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters	68515-51-5, 68648-93-1	All	0.1 mass% of article	false		0.00
	1,2-Benzenedicarboxylic acid, di-C6-8-branched	71888-89-6	All	0.1 mass% of article	false		0.00
	1,2-Benzenedicarboxylic acid, di-C7-11-branched	68515-42-4	All	0.1 mass% of article	false		0.00
	1,2-Benzenedicarboxylic acid, dihexyl ester,	68515-50-4	All	0.1 mass% of article	false		0.00
	1,2-Benzenedicarboxylic acid, dipentylester,	84777-06-0	All	0.1 mass% of article	false		0.00
	1,2-bis(2-methoxyethoxy) ethane (TEGDME);	112-49-2	All	0.1 mass% of article	false		0.00
	1,2-Diethoxyethane	629-14-1	All	0.1 mass% of article	false		0.00

1,2-dimethoxyethane; ethylene glycol dimethyl	110-71-4	All	0.1 mass% of article	false	0.00
1,3-propanesultone	1120-71-4	All	0.1 mass% of article	false	0.00
2-(2H-benzotriazol-2-yl)-4- (tert-butyl)-6-(sec-butyl)	36437-37-3	All	0.1 mass% of article	false	0.00
2-(2H-benzotriazol-2-yl)-4- ,6-ditertpentylphenol	25973-55-1	All	0.1 mass% of article	false	0.00
2,2-bis(4'-hydroxyphenyl)- 4-methylpentane	6807-17-6	All	0.1 mass% of article	false	0.00
2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)pheno	3864-99-1	All	0.1 mass% of article	false	0.00
2-benzotriazol-2-yl-4,6-di- tert-butylphenol (UV-320)	3846-71-7	All	Intentionally added or 0.1 mass% of article	false	0.00
2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo	15571-58-1	All	0.1 mass% of article	false	0.00
4-(1,1,3,3-tetramethylbutyl)phenol	140-66-9	All	0.1 mass% of article	false	0.00
4,4'-isopropylidenediphenol	80-05-7	All	Intentionally added or 0.1 mass% of article	false	0.00
4-Aminoazobenzene	60-09-3	All	0.1 mass% of article	false	0.00
Ammonium pentadecafluorooctanoat	3825-26-1	All	0.1 mass% of article	false	0.00
Benz[a]anthracene	56-55-3; 1718-53-2	All	0.1 mass% of article	false	0.00
Benzo[a]anthracene	56-55-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[a]anthracene	56-55-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[a]pyrene	50-32-8	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[a]pyrene	50-32-8	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[b]fluoranthene	205-99-2	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[b]fluoranthene	205-99-2	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[def]chrysene	50-32-8	All	0.1 mass% of article	false	0.00
Benzo[e]pyrene	192-97-2	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[e]pyrene	192-97-2	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[ghi]perylene	191-24-2	All	0.1 mass% of article	false	0.00
Benzo[j]fluoranthene	205-82-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[j]fluoranthene	205-82-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[k]fluoranthene	207-08-9	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
Benzo[k]fluoranthene	207-08-9	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
Benzo[k]fluoranthene	207-08-9	All	0.1 mass% of article	false	0.00
Benzyl butyl phthalate (BBP)	85-68-7	All	0.1 mass% in homogenous material	false	0.00
Beryllium Oxide	1304-56-9	All	0.1 mass%	false	0.00
Bis (2-ethylhexyl)phthalate	117-81-7	All	0.1 mass% in homogenous material	false	0.00

	Bis(2-methoxyethyl) ether	111-96-6	All	0.1 mass% of article	false	0.00
	Bis(2-methoxyethyl) phthalate	117-82-8	All	0.1 mass% of article	false	0.00
	Bis(pentabromophenyl) ether	1163-19-5	All	0.1 mass% of article	false	0.00
	Bis(tributyltin) oxide (TBTO)	56-35-9	All	Intentionally added or 0.1 mass% of article	false	0.00
	Boric Acid	10043-35-3, 11113-50-1	All	0.1 mass% of article	false	0.00
	Cadmium	7440-43-9	All	0.1 mass% of article	false	0.00
	Cadmium hydroxide	21041-95-2	All	0.1 mass% of article	false	0.00
	Cadmium oxide	1306-19-0	All	0.1 mass% of article	false	0.00
	Cadmium sulphide	1306-23-6	All	0.1 mass% of article	false	0.00
	Chrysen	218-01-9	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
	Chrysen	218-01-9	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
	Chrysene	218-01-9; 1719-03-5	All	0.1 mass% of article	false	0.00
	Cobalt dichloride	7646-79-9	All	0.1 mass% of article	false	0.00
	Decamethylcyclopentasiloxane	541-02-6	All	0.1 mass% of article	false	0.00
	Diarsenic pentoxide	1303-28-2	All	0.1 mass% of article	false	0.00
	Diarsenic trioxide	1327-53-3	All	0.1 mass% of article	false	0.00
	Dibenzo[a,h]anthracene	53-70-3	Rubber or plastic parts that come into direct,	0.0001 mass% of the plastic or rubber part	false	0.00
	Dibenzo[a,h]anthracene	53-70-3	Rubber or plastic parts of toys and childcare	0.00005 mass% of the plastic or rubber part	false	0.00
	Diboron trioxide	1303-86-2	All	0.1 mass% of article	false	0.00
	Dibutyl phthalate (DBP)	84-74-2	All	0.1 mass% in homogenous material	false	0.00
	Dibutyltin dichloride (DBTC)	683-18-1	All	0.1 mass% of article	false	0.00
	Dicyclohexyl phthalate	84-61-7	All	0.1 mass% of article	false	0.00
	Diisobutyl phthalate	84-69-5	All	0.1 mass% in homogenous material	false	0.00
	Di-isodecyl phthalate (DIDP)	68515-49-1, 26761-40-0	All	Intentionally added	false	0.00
	Diisononyl phthalate (DINP)	28553-12-0, 68515-48-0	All	Intentionally added	false	0.00
	Diisopentylphthalate	605-50-5	All	0.1 mass% of article	false	0.00
	Dimethyl Fumarate (DMF)	624-49-7	All	0.00001 mass% of the part	false	0.00
	Di-n-hexyl Phthalate (DnHP)	84-75-3	All	Intentionally added or 0.1 mass% of article	false	0.00
	Dioxobis(stearato)trilead	12578-12-0	All	0.1 mass% of article	false	0.00
	Dipentyl phthalate (DPP)	131-18-0	All	0.1 mass% of article	false	0.00
	Disodium 3,3'-[1,1'-biphenyl]-4,4'-d	573-58-0	All	0.1 mass% of article	false	0.00

Disodium 4-amino-3-[[4'-(2,4-diamino-2,5-dithienyl)phenyl]oxy]benzoate	1937-37-7	All	0.1 mass% of article	false	0.00
Disodium octaborate	12008-41-2	All	0.1 mass% of article	false	0.00
Dodecamethylcyclotetrasiloxane	540-97-6	All	0.1 mass% of article	false	0.00
Fatty acids, C16-18, lead salts	91031-62-8	All	0.1 mass% of article	false	0.00
Fluoranthene	206-44-0; 93951-69-0	All	0.1 mass% of article	false	0.00
Formaldehyde	50-00-0	Textiles	0.0075 mass % of textile	false	0.00
Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7	All	0.1 mass% of article	false	0.00
Lead	7439-92-1	All	0.1 mass% of article	false	0.00
Lead chromate	7758-97-6	All	0.1 mass% of article	false	0.00
Lead chromate molybdate sulphate red (C.I. Pigment 3B2)	12656-85-8	All	0.1 mass% of article	false	0.00
Lead cyanamidate	20837-86-9	All	0.1 mass% of article	false	0.00
Lead dinitrate	10099-74-8	All	0.1 mass% of article	false	0.00
Lead oxide sulfate	12036-76-9	All	0.1 mass% of article	false	0.00
Lead sulfochromate yellow (C.I. Pigment 3B1)	1344-37-2	All	0.1 mass% of article	false	0.00
Lead titanium trioxide	12060-00-3	All	0.1 mass% of article	false	0.00
Lead titanium zirconium oxide	12626-81-2	All	0.1 mass% of article	false	0.00
N,N-dimethylformamide	68-12-2	All	0.1 mass% of article	false	0.00
N-pentyl-isopentylphthalate	776297-69-9	All	0.1 mass% of article	false	0.00
Octamethylcyclotetrasiloxane	556-67-2	All	0.1 mass% of article	false	0.00
Orange lead (lead tetroxide)	1314-41-6	All	0.1 mass% of article	false	0.00
Pentadecafluorooctanoic acid (PFOA)	335-67-1	All	0.1 mass% of article	false	0.00
Pentalead tetraoxide sulphate	12065-90-6	All	0.1 mass% of article	false	0.00
Pentazinc chromate octahydroxide	49663-84-5	All	0.1 mass% of article	false	0.00
Phenanthrene	85-01-8	All	0.1 mass% of article	false	0.00
Potassium hydroxyoctaoxodizincated	11103-86-9	All	0.1 mass% of article	false	0.00
Pyrene	129-00-0; 1718-52-1	All	0.1 mass% of article	false	0.00
Pyrochlore, antimony lead yellow	8012-00-8	All	0.1 mass% of article	false	0.00
reaction mass of 2-ethylhexyl		All	0.1 mass% of article	false	0.00
Silicic acid (H2Si2O5), barium salt (1:1)	68784-75-8	All	0.1 mass% of article	false	0.00
Strontium chromate	7789-06-2	All	0.1 mass% of article	false	0.00
Sulfurous acid, lead salt, dibasic	62229-08-7	All	0.1 mass% of article	false	0.00

	Terphenyl, hydrogenated	61788-32-7	All	0.1 mass% of article	false	0.00	
	Tetralead trioxide sulphate	12202-17-4	All	0.1 mass% of article	false	0.00	
	Trilead dioxide phosphonate	12141-20-7	All	0.1 mass% of article	false	0.00	
	Tris(2-chloroethyl)phosph ate	115-96-8	All	0.1 mass% of article	false	0.00	
	Trixylyl phosphate	25155-23-1	All	0.1 mass% of article	false	0.00	