

Isocom Components 2004 Ltd,

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OPTOSWITCHES

REACH-SVHC STATEMENT

Model Number

Optoswitches Transistor PWB: **H22Ax // ISTS100** (total weight(mg) = 812)

Optoswitches Transistor Flanged: **H21Ax // ISTS200** (total weight(mg) = 822)

This is to confirm that the product(s) referenced above have been evaluated against Regulation (EC) 1907/2006 of the European Parliament, "**Registration, Evaluation, and Authorization of Chemicals (REACH)**", as interpreted by EU Court of Justice decision C-106/14 of 10 September 2015. The compliance status of the product is confirmed as detailed below.

Article 33 of EU Regulation 1907/2006 (<http://echa.europa.eu/candidate-list-table>).

The products(s) referenced above have been evaluated for the presence of the **224 REACH SVHCs** as updated BY ECHA on **10th June 2022**. The product(s) and/or articles* contained within the product(s) **CONTAIN** the following SVHCs in amounts **more than 1000ppm**, as provided in the following table.

*An Article is any item within a part or component of the product which during production is given a special shape, surface or design that determines its function to a greater degree than its chemical composition. An example of articles within an electronic component would be the leads of a through-hole capacitor. For more information, please refer to Example 21 of the EU Chemicals Agency "Guidance for Requirements on Substances in Articles" **NB: including clause 2.6 packaging.**

(https://echa.europa.eu/documents/10162/23036412/articles_en.pdf/cc2e3f93-8391-4944-88e4-efed5fb5112c)

SVHC Name	SVHC CAS #	Location of SVHC / Article Name	Concentration (% of SVHC)	Amount of SVHC (mg)
1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9	'PTIR Compound' (NB: disappears when molded) (Line 76 SVHC Table)	13% in H22Ax / H21Ax / IS100 / IS200	1.84 in H22Ax / H21Ax / IS100 / IS200

Additional information on the European Union's REACH regulation can be found here:

<https://echa.europa.eu/regulations/reach/understanding-reach>

<https://echa.europa.eu/candidate-list-table>

NB: Material Declaration Sheet available on request

Customer: Avnet Europe BV and EBV Elektronik GmbH & Co KG, its subsidiaries and affiliated EMEA group companies

Signature:



Date: 8th Aug. 2022

Name: **Maureen Smalls** - QA / Compliance

ISOCOM Components 2004 Ltd.

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SVHC 224 Listings at 17.01.2022

<u>No</u>	<u>Substance</u>	<u>CAS No.</u>
1	Anthracene	120-12-7
2	4,4'- Diaminodiphenylmethane (or methylene dianiline)	101-77-9
3	Dibutyl phthalate (DBP)	84-74-2
4	Cobalt dichloride	7646-79-9
5	Diarsenic pentaoxide	1303-28-2
6	Diarsenic trioxide	1327-53-3
7	Sodium dichromate, dihydrate	7789-12-0
8	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	81-15-2
9	Bis (2-ethylhexyl)phthalate (DEHP)	117-81-7
10	Hexabromocyclododecane (HBCDD)	25637-99-4
11	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	85535-84-8
12	Bis(tributyltin)oxide (TBTO)	56-35-9
13	Lead hydrogen arsenate	7784-40-9
14	Benzyl butyl phthalate (BBP)	85-68-7
15	Triethyl arsenate	15606-95-8
16	Anthracene oil	90640-80-5
17	Anthracene oil, anthracene paste, distn. lights	91995-17-4
18	Anthracene oil, anthracene paste, anthracene fraction	91995-15-2
19	Anthracene oil, anthracene low	90640-82-7
20	Anthracene oil, anthracene paste	90640-81-6
21	Coal tar pitch, high temperature	65996-93-2
22	Acrylamide	79-06-1
23	Aluminosilicate, refractory ceramic fibres	
24	Zirconium aluminosilicate refractory ceramic fibres	
25	2,4-dinitrotoluene	121-14-2
26	Di-isobutyl phthalate	84-69-5
27	Lead chromate	7758-97-6
28	Lead chromate molybdate sulphate red (C I Pigment Red 104)	12656-85-8
29	Lead sulfochromate yellow (C I Pigment Yellow 34)	1344-37-2
30	Tris (2-chloroethyl) phosphate	115-96-8
31	Trichloroethylene	79-01-6
32	Boric acid	10043-35-3 and 11113-50-1
33	Disodium tetraborate anhydrous	1303-96-4, 1330-43-4 and 12179-04-3
34	Tetraboron disodium heptaoxide, hydrate	12267-73-1
35	Sodium chromate	7775-11-3
36	Potassium chromate	7789-00-6
37	Ammonium dichromate	7789-09-5

38	Potassium dichromate	7778-50-9
39	Cobalt(II) sulphate	10124-43-3
40	Cobalt(II) dinitrate	10141-05-6
41	Cobalt(II) carbonate	513-79-1
42	Cobalt(II) diacetate	71-48-7
43	2-Methoxyethanol	109-86-4
44	2-Ethoxyethanol	110-80-5
45	Chromium trioxide	1333-82-0
46	Chromic acid	7738-94-5
	Dichromic acid	13530-68-2
47	2-ethoxyethyl acetate	111-15-9
48	Strontium chromate	7789-06-2
49	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	68515-42-4
50	Hydrazine	302-01-2
51	1-methyl-2-pyrrolidone	872-50-4
52	1,2,3-trichloropropane	96-18-4
53	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	71888-89-6
54	4-(1,1,3,3-tetramethylbutyl)phenol, (4-tert-Octylphenol)	140-66-9
55	2-Methoxyaniline o-Anisidine	90-04-0
56	Arsenic acid	7778-39-4
57	Calcium arsenate	7778-44-1
58	Trilead diarsenate	3687-31-8
59	1,2-Dichloroethane ethylene dichloride	107-06-2
60	Bis(2-methoxyethyl) ether	111-96-6
61	Bis(2-methoxyethyl) phthalate	117-82-8
62	N,N-dimethylacetamide (DMAC)	127-19-5
63	Formaldehyde, oligomeric reaction products with aniline (technical MDA)	25214-70-4
64	Lead diazide Lead azide	13424-46-9
65	Lead styphnate	15245-44-0
66	2,2'-dichloro-4,4'-methylenedianiline (MOCA)	101-14-4
67	Dichromium tris(chromate)	24613-89-6
68	Potassium hydroxyoctaoxidizincatedichromate	11103-86-9
69	Pentazinc chromate octahydroxide	49663-84-5
70	Phenolphthalein	77-09-8
71	Lead dipicrate	6477-64-1
72	Formamide	75-12-7
73	[4-[[4-anilino-1-naphthyl][4 (dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	2580-56-5
74	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	101-61-1
75	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	90-94-8
76	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione (TGIC)	2451-62-9
77	α,α -Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	6786-83-0
78	Diboron trioxide	1303-86-2
79	1,2-dimethoxyethane ethylene glycol dimethyl ether (EGDME)	110-71-4
80	Lead(II) bis(methanesulfonate)	17570-76-2

81	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	561-41-1
82	1,2-bis(2-methoxyethoxy)ethane (TEGDME triglyme)	112-49-2
83	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β -TGIC)	59653-74-6
84	[4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	548-62-9
85	Bis(pentabromophenyl) ether (decabromodiphenyl ether DecaBDE)	1163-19-5
86	Pentacosafuorotridecanoic acid	72629-94-8
87	Tricosafuorododecanoic acid	307-55-1
88	Henicosafuoroundecanoic acid	2058-94-8
89	Heptacosafuorotetradecanoic acid	376-06-7
90	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	123-77-3
91	Cyclohexane-1,2-dicarboxylic anhydride [1]	85-42-7
	Cis-cyclohexane-1,2-dicarboxylic anhydride [2]	13149-00-3
	Trans-cyclohexane-1,2-dicarboxylic anhydride [3]	14166-21-3
92	Hexahydromethylphthalic anhydride [1]	25550-51-0
	Hexahydro-4-methylphthalic anhydride [2]	19438-60-9
	Hexahydro-1-methylphthalic anhydride [3]	48122-14-1
	Hexahydro-3-methylphthalic anhydride [4]	57110-29-9
93	4-Nonylphenol, branched and linear	
94	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated	
95	Methoxyacetic acid	625-45-6
96	N,N-dimethylformamide	68-12-2
97	Dibutyltin dichloride (DBTC)	683-18-1
98	Lead monoxide (Lead oxide)	1317-36-8
99	Orange lead (Lead tetroxide)	1314-41-6
100	Lead bis(tetrafluoroborate)	13814-96-5
101	Trilead bis(carbonate)dihydroxide	1319-46-6
102	Lead titanium trioxide	12060-00-3
103	Lead titanium zirconium oxide	12626-81-2
104	Silicic acid, lead salt	11120-22-2
105	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped	68784-75-8
106	1-bromopropane (n-propyl bromide)	106-94-5
107	Methyloxirane (Propylene oxide)	75-56-9
108	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	84777-06-0
109	Diisopentylphthalate (DIPP)	605-50-5
110	N-pentyl-isopentylphthalate	776297-69-9
111	1,2-diethoxyethane	629-14-1
112	Acetic acid, lead salt, basic	51404-69-4
113	Lead oxide sulfate	12036-76-9
114	[Phthalato(2-)]dioxotrilead	69011-06-9
115	Dioxobis(stearato)trilead	12578-12-0
116	Fatty acids, C16-18, lead salts	91031-62-8
117	Lead cyanamidate	20837-86-9
118	Lead dinitrate	10099-74-8
119	Pentalead tetraoxide sulphate	12065-90-6
120	Pyrochlore, antimony lead yellow	8012-00-8

121	Sulfurous acid, lead salt, dibasic	62229-08-7
122	Tetraethyllead	78-00-2
123	Tetralead trioxide sulphate	12202-17-4
124	Trilead dioxide phosphonate	12141-20-7
125	Furan	110-00-9
126	Diethyl sulphate	64-67-5
127	Dimethyl sulphate	77-78-1
128	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	143860-04-2
129	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	88-85-7
130	4,4'-methylenedi- <i>o</i> -toluidine	838-88-0
131	4,4'-oxydianiline and its salts	101-80-4
132	4-aminoazobenzene	60-09-3
133	4-methyl- <i>m</i> -phenylenediamine (toluene-2,4-diamine)	95-80-7
134	6-methoxy- <i>m</i> -toluidine (p-cresidine)	120-71-8
135	Biphenyl-4-ylamine	92-67-1
136	<i>o</i> -aminoazotoluene [(4- <i>o</i> -tolylazo- <i>o</i> -toluidine)]	97-56-3
137	<i>o</i> -toluidine	95-53-4
138	<i>N</i> -methylacetamide	79-16-3
139	Cadmium	7440-43-9
140	Ammonium pentadecafluorooctanoate (APFO)	3825-26-1
141	Pentadecafluorooctanoic acid (PFOA)	335-67-1
142	Dipentyl phthalate (DPP)	131-18-0
143	4-Nonylphenol, branched and linear, ethoxylated	
144	Cadmium oxide	1306-19-0
145	Cadmium sulphide	1306-23-6
146	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	1937-37-7
147	Dihexyl phthalate	84-75-3
148	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	96-45-7
149	Trixylyl phosphate	25155-23-1
150	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	573-58-0
151	Lead di(acetate)	301-04-2
152	Cadmium chloride	10108-64-2
153	1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear	68515-50-4
154	Sodium peroxometaborate	7632-04-4
155	Sodium perborate; perboric acid, sodium salt	
156	2-benzotriazol-2-yl-4,6-di- <i>tert</i> -butylphenol (UV-320)	3846-71-7
157	2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE)	15571-58-1
158	reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)	
159	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	25973-55-1
160	Cadmium fluoride	7790-79-6
161	Cadmium sulphate	10124-36-4

		31119-53-6
162	1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with $\geq 0.3\%$ of dihexyl phthalate (EC No. 201-559-5)	68515-51-5 68648-93-1
163	5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual stereoisomers of [1] and [2] or any combination thereof]	
164	Nitrobenzene	98-95-3
165	2,4-di-tert-butyl-6(5-chlorobenzotriazol-2-yl)phenol (UV-327)	3864-99-1
166	2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)	36437-37-3
167	1,3-propanesultone	1120-71-4
168	Perfluorononan-1-oic-acid and its sodium and ammonium salt	375-95-1
169	Benzo[def]chrysene (Benzo[a]pyrene)	50-32-8
170	4,4'-isopropylidenediphenol	80-05-7
171	4-Heptylphenol, branched and linear	
172	Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts	
	Nonadecafluorodecanoic acid	335-76-2
	Ammonium nonadecafluorodecanoate	3108-42-7
	Decanoic acid, nonadecafluoro-, sodium salt	3830-45-3
173	p-(1,1-dimethylpropyl)phenol	80-46-6
174	Perfluorohexane-1-sulphonic acid and its salts	
175	Benz[a]anthracene	56-55-3, 1718-53-2
176	Cadmium carbonate	513-78-0
177	Cadmium hydroxide	21041-95-2
178	Cadmium nitrate	10022-68-1, 10325-94-7
179	Chrysene	218-01-9, 1719-03-5
180	Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" TM)	-
181	Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP)	-
182	Benzene-1,2,4-tricarboxylic acid 1,2 anhydride trimellitic anhydride; TMA	552-30-7
183	Benzo[ghi]perylene	191-24-2
184	Decamethylcyclopentasiloxane D5	541-02-6
185	Dicyclohexyl phthalate DCHP	84-61-7
186	Disodium octaborate	12008-41-2
187	Dodecamethylcyclohexasiloxane D6	540-97-6
188	Ethylenediamine EDA	107-15-3
189	Lead	7439-92-1
190	Octamethylcyclotetrasiloxane D4	556-67-2
191	Terphenyl, hydrogenated	61788-32-7
192	2,2-bis(4'-hydroxyphenyl)-4-methylpentane	6807-17-6
193	Benzo[k]fluoranthene	207-08-9
194	Fluoranthene	206-44-0
195	Phenanthrene	85-01-8

196	Pyrene	129-00-0
197	1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one	15087-24-8
198	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts and its acyl halides	-
199	2-methoxyethyl acetate	110-49-6
200	4-tert-butylphenol	98-54-4
201	Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with $\geq 0.1\%$ w/w of 4-nonylphenol, branched and linear (4-NP)	-
202	Perfluorobutane sulfonic acid (PFBS) and its salts	-
203	Diisohexyl phthalate	71850-09-4
204	2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one	71868-10-5
205	2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone	119313-12-1
206	1-vinylimidazole	1072-63-5
207	2-methylimidazole	693-98-1
208	butyl 4-hydroxybenzoate	94-26-8
209	Dibutylbis(pentane-2,4-dionato-O,O')tin	22673-19-4
210	Bis(2-(2-methoxyethoxy)ethyl)ether	143-24-8
211	Diocetyl tin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	-
	diocetyl tin dilaurate; stannane, dioctyl-, bis(coco acyloxy) derivs.	-
	Stannane, dioctyl-, bis(coco acyloxy) derivs.	91648-39-4
	Diocetyl tin dilaurate	3648-18-8
212	Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP)	-
	Phenol, dodecyl-, branched	121158-58-5
	4-isododecylphenol	27459-10-5
	Phenol, 4-dodecyl, branched	210555-94-5
	Phenol, (tetrapropenyl) derivatives	74499-35-7
	Phenol, 4-isododecyl-	27147-75-7
	Phenol, tetrapropylene-	57427-55-1
213	Orthoboric acid, sodium salt	13840-56-7
	Boric acid, sodium salt	1333-73-9
	Boric acid (H3BO3), disodium salt	22454-04-2
	boric acid (H3BO3), sodium salt, hydrate	25747-83-5
	Boric acid (H3BO3), sodium salt (1:1)	14890-53-0
	Trisodium orthoborate	14312-40-4
214	Medium-chain chlorinated paraffins (MCCP)	-
	di-, tri- and tetrachlorotetradecane	-
	Alkanes, C14-16, chloro	1372804-76-6
	Alkanes, C14-17, chloro	85535-85-9
	Tetradecane, chloro derivs.	198840-65-2
	Chlorinated paraffins with carbon chain lengths in the range C14-17 and chlorination levels at or exceeding 45 per cent chlorine by weight	-
215	Glutaral	111-30-8
216	4,4'-(1-methylpropylidene)bisphenol	77-40-7
217	2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers	-

	2-(4-tert-butylbenzyl)propionaldehyde	80-54-6
	(2S)-3-(4-tert-butylphenyl)-2-methylpropanal	75166-30-2
	(2R)-3-(4-tert-butylphenyl)-2-methylpropanal	75166-31-3
218	2,2-bis(bromomethyl)propane1,3-diol(BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA)	-
	2,2-bis(bromomethyl)propane1,3-diol(BMP);	3296-90-0
	2,2-dimethylpropan-1-ol, tribromo derivative (TBNPA);	36483-57-5
	3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA);	1522-92-5
	2,3-dibromo-1-propanol (2,3-DBPA)	96-13-9
219	1,4-dioxane	123-91-1
220	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	119-47-1
221	tris(2-methoxyethoxy)vinylsilane	1067-53-4
222	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one covering any of the individual isomers and/or combinations thereof (4-MBC)	-
	(3E)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	1782069-81-1
	(1R,3E,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	95342-41-9
	(1S,3Z,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	852541-25-4
	(±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan-2-one	36861-47-9
	(1R,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	741687-98-9
	(1S,3E,4R)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	852541-30-1
	(1R,3Z,4S)-1,7,7-trimethyl-3-(4-methylbenzylidene)bicyclo[2.2.1]heptan-2-one	852541-21-0
223	S-(tricyclo(5.2.1.0 ^{2,6})deca-3-en-8(or 9)-yl O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate	255881-94-8
	Phenol, dodecyl-, branched	121158-58-5
	Phenol, (tetrapropenyl) derivatives	74499-35-7
	Phenol, tetrapropylene-	57427-55-1
	Phenol, 4-dodecyl, branched	210555-94-5
	4-isododecylphenol	27459-10-5
	Phenol, 4-isododecyl-	27147-75-7
224	N-(hydroxymethyl)acrylamide	924-42-5