

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
1	IC106, IC807, IC808, IC809	4		TC7SET17FU	TOSHIBA	Schmitt Buffer	SOT-353		
2	IC600	1		TMS320F28377S PTP	TI	CPU 32bit			
3	IC601	1		LMV844QMA	TI	OP Amp			
4	IC602	1		LM4040QCEM3-3.0	TI	Shunt Regulator			
5	IC620	1		TPS3702CX33Q DDCRQ1	TI	Undervoltage Monitor			
6	IC621	1		TPS3702CX12Q DDCRQ1	TI	Undervoltage Monitor			
7	IC650	1		TPS629210QDR LRQ1	TI	Low-Voltage Converter			
8	IC651	1		TPS62420QDRC RQ1	TI	Step-Down Converter			
9	IC710, IC711, IC712, IC719, IC720, IC721, IC722, IC729, IC730, IC731, IC732, IC739, IC740, IC741, IC742, IC749, IC811, IC812, IC817, IC818, IC823, IC824, IC829, IC830	24		TLVH431AQDBV RQ1	TI	Shunt Regulator, 18V			
10	IC713, IC714, IC716, IC717, IC723, IC724, IC726, IC727, IC733, IC734, IC736, IC737, IC743, IC744, IC746, IC747, IC813, IC814, IC819, IC820, IC825, IC826, IC831, IC832	24		INA290A2QDCK RQ1	TI	Current Sense Amp			
11	IC715, IC718, IC725, IC728, IC735, IC738, IC745, IC748, IC815, IC816, IC821, IC822, IC827, IC828, IC833, IC834	16		TS5A3159QDBV RQ1	TI	Analog Switch			
12	IC800	1		LM5001IDQ1	TI	Regulator			
13	IC801	1		LM5010AQ1MH	TI	Switching Regulator			
14	IC802	1		MAX6765TTLD2	MAXIM	Linear Regulators			
15	IC803, IC804, IC805, IC806	4		BD750L2FP3	ROHM	3 Terminal Regulator			

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
16	Q500, Q512, Q522, Q532, Q542, Q711, Q713, Q716, Q718, Q721, Q723, Q726, Q728, Q731, Q733, Q736, Q738, Q741, Q743, Q746, Q748, Q801, Q802, Q815, Q817, Q819, Q821, Q823, Q825, Q827, Q829	31		2SC4117-GR	TOSHIBA	NPN Transistor	SOT-323		
17	Q510, Q511, Q520, Q521, Q530, Q531, Q540, Q541	8		RN1907	TOSHIBA	Transistor	SOT-363		
18	Q712, Q714, Q717, Q719, Q722, Q724, Q727, Q729, Q732, Q734, Q737, Q739, Q742, Q744, Q747, Q749, Q816, Q818, Q820, Q822, Q824, Q826, Q828, Q830	24		RN4907	TOSHIBA	Transistor, 50V, 0.1A	SOT-363		
19	D620	1		1SS405	TOSHIBA	Switching Diode, 20V, 50mA	SOD-523		
20	D711, D712, D713, D721, D722, D731, D732, D741, D742, D812, D813, D912	12		1SS362FV	TOSHIBA	Switching Diode, 80V, 100mA	SOT-723		
21	D800, D801, D802, D803, D804, D805, D806, D807, D811	9		CMH01	TOSHIBA	Switching Diode, 200V, 3A	M-FLAT		
22	D808	1		CRY82	TOSHIBA	Zenar Diode	S-FLAT		
23	D809, D810	2		1SS307E	TOSHIBA	Switching Diode, 80V, 100mA	SOD-523		
24	DS510, DS520, DS530, DS540	4		KB	OSRAM	Blue LED, DELPS2.12			
25	DS511, DS512, DS521, DS522, DS531, DS532, DS541, DS542	8		KT	OSRAM	Green LED, DELQS1.12			
26	DS513, DS523, DS533, DS543	4		KS	OSRAM	Red LED, DELPS1.22			
27	D650	1		RB168VYM-30FH	ROHM	Schottky Barrier Diode, 30V, 1A			
28	R701, R702, R703, R704, R711, R712, R713, R714, R716, R717, R718, R719, R901, R902, R903, R904, R911, R912, R913, R914, R916, R917, R918, R919	24	0Ω			1A		1.6 x 0.8 (0603)	
29	R500, R562, R569, R572, R579, R582, R592, R599, R804	9	10kΩ			±1%, 1/5W		1.6 x 0.8 (0603)	
30	R501, R564, R574, R584, R594, R816	6	100Ω			±5%, 1/4W		2.0 x 1.25 (0805)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
31	R502, R565, R575, R585, R595, R817	6	1.8k Ω			$\pm 1\%$, 1/3W		1.6 x 0.8 (0603)	
32	R503, R566, R576, R586, R596, R818	6	8.2k Ω			$\pm 1\%$, 1/3W		1.6 x 0.8 (0603)	
33	R504, R505, R567, R568, R577, R578, R587, R588, R597, R598, R802, R803, R810, R811	14	22k Ω			$\pm 1\%$, 1/3W		1.6 x 0.8 (0603)	
34	R506, R507, R508, R514, R515, R524, R525, R534, R535, R544, R545, R551, R552, R553, R554, R556, R557, R558, R559, R589, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R613, R614, R618, R620, R623, R624, R634, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R674	48	10k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
35	R510, R511, R520, R521, R530, R531, R540, R541	8	47 Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
36	R512, R513, R522, R523, R532, R533, R542, R543	8	100 Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
37	R516, R526, R536, R546, R563, R573, R583, R593, R656, R657, R658	11	4.7k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
38	R517, R518, R527, R528, R537, R538, R547, R548	8	560 Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
39	R519, R529, R539, R549	4	2.7k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
40	R631, R655	2	56k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
41	R632, R633, R669	3	2.2k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
42	R635, R636, R637, R648	4	47k Ω			$\pm 1\%$, 1/10W		1.6 x 0.8 (0603)	
43	R659	1	39 Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
44	R660	1	300 Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
45	R661, R672	2	1k Ω			$\pm 1\%$, 1/5W		1.6 x 0.8 (0603)	
46	R662, R663, R664, R665	4	1 Ω			$\pm 5\%$, 1/8W		1.6 x 0.8 (0603)	
47	R670	1	240k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
48	R671	1	240k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
49	R673	1	36k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
50	R675	1	7.5k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
51	R676	1	330k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
52	R677	1	75k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
53	R678, R679	2	200k Ω			$\pm 0.5\%$, 1/5W		1.6 x 0.8 (0603)	
54	R706, R707, R708, R709, R736, R737, R738, R756, R757, R758, R776, R777, R778, R796, R797, R798, R836, R837, R838, R856, R857, R858, R876, R877, R878, R896, R897, R898, R906, R907, R908, R909, R936, R937, R956, R957, R976, R977, R996, R997	40	47 Ω			$\pm 1\%$, 1/8W		1.6 x 0.8 (0603)	
55	R722, R723, R742, R743, R762, R763, R782, R783, R822, R823, R842, R843, R862, R863, R882, R883, R922, R923, R942, R943, R962, R963, R982, R983	24	22k Ω			$\pm 1\%$, 1/10W		1.6 x 0.8 (0603)	
56	R724, R725, R726, R727, R744, R745, R746, R747, R764, R765, R766, R767, R784, R785, R786, R787, R824, R825, R826, R827, R844, R845, R846, R847, R864, R865, R866, R867, R884, R885, R886, R887, R924, R925, R926, R927, R944, R945, R946, R947, R964, R965, R966, R967, R984, R985, R986, R987	48	1k Ω			$\pm 1\%$, 1/8W		1.6 x 0.8 (0603)	
57	R728, R729, R748, R749, R768, R769, R788, R789, R828, R829, R848, R849, R868, R869, R888, R889, R928, R929, R948, R949, R968, R969, R988, R989	24	2.7k Ω			$\pm 1\%$, 1/10W		1.6 x 0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
58	R730, R731, R732, R733, R750, R751, R752, R753, R770, R771, R772, R773, R790, R791, R792, R793, R830, R831, R832, R833, R850, R851, R852, R853, R870, R871, R872, R873, R890, R891, R892, R893, R930, R931, R932, R933, R950, R951, R952, R953, R970, R971, R972, R973, R990, R991, R992, R993	48	10Ω			±5%, 1/4W		3.2 x 1.6 (1206)	
59	R734, R735, R754, R755, R774, R775, R794, R795, R834, R835, R854, R855, R874, R875, R894, R895, R934, R935, R954, R955, R974, R975, R994, R995	24	10kΩ			±5%, 1/10W		1.6 x 0.8 (0603)	
60	R800	1	27kΩ			±1%, 1/5W		1.6 x 0.8 (0603)	
61	R801	1	100kΩ			±1%, 1/5W		1.6 x 0.8 (0603)	
62	R805, R806	2	18kΩ			±1%, 1/5W		1.6 x 0.8 (0603)	
63	R807	1	10Ω			±5%, 1/2W		2.0 x 1.25 (0805)	
64	R808	1	12kΩ			±0.5%, 1/5W		1.6 x 0.8 (0603)	
65	R809	1	1kΩ			±0.5%, 1/5W		1.6 x 0.8 (0603)	
66	R812	1	430kΩ			±1%, 1/5W		1.6 x 0.8 (0603)	
67	R813	1	1.6Ω			±1%, 1/3W		1.6 x 0.8 (0603)	
68	R814	1	6.8kΩ			±0.5%, 1/5W		1.6 x 0.8 (0603)	
69	R815	1	1.8kΩ			±0.5%, 1/5W		1.6 x 0.8 (0603)	
70	R819, R900	2	10Ω			±0.5%, 1/10W		1.6 x 0.8 (0603)	
71	R720, R721, R740, R741, R760, R761, R780, R781, R820, R821, R840, R841, R860, R861, R880, R881, R920, R921, R940, R941, R960, R961, R980, R981	24	1kΩ			±1%, 1/10W		1.6 x 0.8 (0603)	Not Mounted
72	R739, R759, R779, R799, R839, R859, R879, R899, R939, R959, R979, R999	12	10Ω			±1%, 1/10W		1.6 x 0.8 (0603)	Not Mounted

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
73	L650	1	3.3μH	XGL3520-332MEC	COIL CRAFT	±20%		3.2 x 3.5	
74	L651, L656	2	3.3μH	VLS3015CX-3R3M-H	TDK	±20%		3.0 x 3.0	
75	L652	1	220H	BLM21PG221SN1D	MURATA	Ferrite Beads, ±20%		2.0 x 1.25	
76	L653, L654	2	60H	BLM21PG600BH1	MURATA	Ferrite Beads		2.0 x 1.25	
77	L800	1	33μH	LAYPH06045DL330MGA	TAIYO YUDEN	Chip Coil, ±20%		6.3 x 6.0	
78	L801	1	560μH	MSS1278H-564K_D	COIL CRAFT	±10%		2.0 x 12.0	
79	L802, L803, L804, L805, L806, L807, L808, L809, L810, L811, L812, L813, L814, L815, L816, L817, L818, L819, L820, L821	20	100μH	CLF12555T-101M-D	TDK	±20%		12.5 x 12.1	
80	C500, C501, C516, C517, C526, C527, C536, C537, C546, C547, C800, C801	12	1000pF			Ceramic, 100V, ±10%		1.6 x 0.8 (0603)	
81	C502, C518, C528, C538, C548, C819, C820	7	470pF			Ceramic, 50V, ±5%		1.6 x 0.8 (0603)	
82	C510, C511, C514, C520, C521, C524, C530, C531, C534, C540, C541, C544	12	1000pF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
83	C512, C513, C522, C523, C532, C533, C542, C543,	8	4700pF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
84	C515, C525, C535, C545	4	2200pF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
85	C600, C601, C602	3	1μF			Ceramic, 16V, ±10%		1.6 x 0.8 (0603)	
86	C603, C620, C621, C665, C666, C667, C668, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C682, C683, C684, C685, C686, C687, C688, C689, C690, C691, C692, C693, C694, C695, C696, C697, C698, C699, C700	39	0.1μF			Ceramic, 25V, ±10%		1.6 x 0.8 (0603)	
87	C604, C605, C606, C607	4	2.2μF			Ceramic, 16V, ±20%		2.0 x 1.25 (0805)	
88	C622, C805	2	0.01μF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
89	C635, C636, C637, C648, C651, C702, C716, C717, C718, C726, C727, C728, C736, C737, C738, C746, C747, C748, C756, C757, C758, C766, C767, C768, C776, C777, C778, C786, C787, C788, C804, C825, C826, C827, C828, C916, C917, C918, C919, C926, C927, C928, C929, C936, C937, C938, C939, C946, C947, C948, C949	51	0.1μF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
90	C652, C703, C705	3	22μF			Ceramic, 6.3V, ±20%		3.2 x 1.6 (1206)	
91	C654, C658, C661	3	10μF			Ceramic, 10V, ±10%		2.0 x 1.25 (0805)	
92	C655, C656, C659, C660	4	2.2μF			Ceramic, 10V, ±20%		1.6 x 0.8 (0603)	
93	C701, C808, C816, C818	4	10μF			Ceramic, 50V, ±10%		3.2 x 1.6 (1206)	
94	C704	1	33pF			Ceramic, 50V, ±5%		1.6 x 0.8 (0603)	
95	C712, C722, C732, C742, C752, C762, C772, C782	8	0.047 μF			Ceramic, 50V, ±5%		3.2 x 1.6 (1206)	
96	C713, C723, C733, C743, C753, C763, C773, C783	8	33nF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
97	C714, C715, C724, C725, C734, C735, C744, C745, C754, C764, C765, C775, C784, C785, C843, C869, C913, C914, C915, C923, C924, C925, C933, C934, C935, C943, C944, C945	28	4700 pF			Ceramic, 50V, ±5%		1.6 x 0.8 (0603)	
98	C802, C803, C809	3	1μF			Ceramic, 50V, ±10%		2.0 x 1.25 (0805)	
99	C806	1	22pF			Ceramic, 50V, ±5%		1.6 x 0.8 (0603)	
100	C807	1	0.015 μF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
101	C810, C811, C836, C837	4	22μF			Ceramic, 100V, ±20%		6.0 x 5.0	
102	C812, C814	2	0.1μF			Ceramic, 100V, ±10%		3.2 x 1.6 (1206)	
103	C813	1	4700p F			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	
104	C815	1	0.022 μF			Ceramic, 50V, ±10%		1.6 x 0.8 (0603)	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
105	C817	1	1 μ F			Ceramic, 25V, $\pm$ 10%		1.6 x 0.8 (0603)	
106	C829, C830, C831, C832	4	4.7 μ F			Ceramic, 16V, $\pm$ 10%		2.0 x 1.25 (0805)	
107	C650, C821, C822, C823, C824	5	47 μ F	UCZ1C470MCL1 GS	nichicon	Electrolytic, 16V, $\pm$ 20%		6.6 x 6.6	
108	C662, C663, C664	3	100 μ F	UCZ1C101MCS1 GS	nichicon	Electrolytic, 16V, $\pm$ 20%		8.3 x 8.3	
109	C710, C711, C720, C721, C730, C731, C740, C741, C750, C751, C760, C761, C770, C771, C780, C781, C910, C911, C920, C921, C930, C931, C940, C941	24	0.1 μ F			Ceramic, 50V, $\pm$ 10%		1.6 x 0.8 (0603)	Not Mounted
110	C719, C729, C886, C887, C888, C889, C890, C891	8	4700p F			Ceramic, 50V, $\pm$ 5%		1.6 x 0.8 (0603)	Not Mounted
111	CN1, CN101, CN201, CN301	4		B6B-PH-K-S	JST	Connector, Through Hole, 6 Positions		13.9 x 4.5	
112	CN2, CN102, CN202, CN302	4		B9B-PH-K-S	JST	Connector, Through Hole, 9 Positions		19.9 x 4.5	
113	CN3, CN103, CN203, CN303	4		B8B-XH-A	JST	Connector, Through Hole, 8 Positions		22.4 x 5.75	
114	CN4, CN104, CN204, CN304	4		B5B-PH-K-S	JST	Connector, Through Hole, 5 Positions		11.9 x 4.5	
115	CN5, CN105, CN205, CN305	4		B2B-PH-K-S	JST	Connector, Through Hole, 2 Positions		5.9 x 4.5	
116	CN6	1		B2B-XH-A	JST	Connector, Through Hole, 2 Positions		7.4 x 5.75	
117	CN7	1		B3B-XH-A	JST	Connector, Through Hole, 3 Positions		9.9 x 5.75	
118	CN208, CN307, CN308, CN407, CN408, CN508, CN509, CN618, CN910, CN920, CN936, CN940	12		B2P-VH	JST	Connector, Through Hole, 2 Positions		7.86 x 8.5	

Item No.	Designator	Quantity	Value	Part Number	Manufacturer	Description	Packaging	Typical Dimension mm (inch)	Not Mounted
119	CN400, CN500, CN501, CN503, CN504, CN506, CN510, CN511, CN513, CN514, CN516, CN520, CN530, CN540, CN911, CN913, CN921, CN923, CN924, CN926, CN927, CN929, CN930, CN932, CN933, CN935, CN937, CN939, CN941, CN943, CN945, CN962	32		TSM-102-01-L-SV	Samtec	Connector, SMD, 2 Positions		5.08 x 2.54	
120	CN502, CN505, CN512, CN515, CN912, CN922, CN925, CN928, CN931, CN934, CN938, CN942, CN952, CN953, CN954, CN955, CN956, CN957, CN958, CN959, CN961, CN963, CN964	23		TSW-101-07-G-S	Samtec	Pin Header, Through Hole, 1 Position		2.54 x 2.54	
121	CN620	1		TSM-107-01-L-DV	Samtec	Pin Header, SMD, 14 Positions		17.78 x 5.08	
122	CN960	1		HW-1-S	MAC8	Pin Header, SMD, 1 Position		3.2 x 1.6	
123	J801, J802, J803, J804, J805, J806, J807, J808, J809, J810, J811, J812, J813, J814, J817, J818, J820, J823, J826, J827, J828, J829	22				Jumper, 0Ω, 1A		1.6 x 0.8 (0603)	
124	TP801, TP802, TP804, TP805, TP806	5		HW-1-S	MAC8	Test Pin, SMD, 1 Position		3.2 x 1.6	
125	TP803	1		TSW-101-07-G-S	Samtec	Test Pin, Through Hole, 1 Position		2.54 x 2.54	

Terms of Use

This terms of use is made between Toshiba Electronic Devices and Storage Corporation ("We") and Customer who downloads or uses this Reference Design. Customer shall comply with this terms of use. This Reference Design means all documents and data in order to design electronics applications on which our semiconductor device is embedded.

Section 1. Restrictions on usage

1. This Reference Design is provided solely as reference data for designing electronics applications. Customer shall not use this Reference Design for any other purpose, including without limitation, verification of reliability.
2. Customer shall not use this Reference Design for sale, lease or other transfer.
3. Customer shall not use this Reference Design for evaluation in high or low temperature, high humidity, or high electromagnetic environments.
4. This Reference Design shall not be used for or incorporated into any product or system whose manufacture, use, or sale is prohibited under any applicable laws or regulations.

Section 2. Limitations

1. We reserve the right to make changes to this Reference Design without notice.
2. This Reference Design should be treated as a reference only. WE ARE NOT RESPONSIBLE FOR ANY INCORRECT OR INCOMPLETE DATA AND INFORMATION.
3. Semiconductor devices can malfunction or fail. When designing electronics applications by referring to this Reference Design, Customer is responsible for complying with safety standards and for providing adequate designs and safeguards for their hardware, software and systems which minimize risk and avoid situations in which a malfunction or failure of semiconductor devices could cause loss of human life, bodily injury or damage to property, including data loss or corruption. Customer must also refer to and comply with the latest versions of all relevant our information, including without limitation, specifications, data sheets and application notes for semiconductor devices, as well as the precautions and conditions set forth in the "Semiconductor Reliability Handbook".
4. Designing electronics applications by referring to this Reference Design, Customer must evaluate the whole system sufficiently. Customer is solely responsible for applying this Reference Design to Customer's own product design or applications. WE ASSUME NO LIABILITY FOR CUSTOMER'S PRODUCT DESIGN OR APPLICATIONS.
5. WE SHALL NOT BE RESPONSIBLE FOR ANY INFRINGEMENT OF PATENTS OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES THAT MAY RESULT FROM THE USE OF THIS REFERENCE DESIGN. NO LICENSE TO ANY INTELLECTUAL PROPERTY RIGHT IS GRANTED BY THIS TERMS OF USE, WHETHER EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE.
6. THIS REFERENCE DESIGN IS PROVIDED "AS IS". WE (a) ASSUME NO LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OR LOSS, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS, LOSS OF OPPORTUNITIES, BUSINESS INTERRUPTION AND LOSS OF DATA, AND (b) DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES AND CONDITIONS RELATED TO THIS REFERENCE DESIGN, INCLUDING WITHOUT LIMITATION, WARRANTIES OR CONDITIONS OF FUNCTION AND WORKING, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY OF INFORMATION, OR NONINFRINGEMENT.

Section 3. Terms and Termination

It is assumed that Customer agrees to any and all this terms of use if Customer downloads or uses this Reference Design. We may, at its sole and exclusive discretion, change, alter, modify, add, and/or remove any part of this terms of use at any time without any prior notice. We may terminate this terms of use at any time and without any cause. Upon termination of this terms of use, Customer shall eliminate this Reference Design. Furthermore, upon our request, Customer shall submit to us a written confirmation to prove elimination of this Reference Design.

Section 4. Export Control

Customer shall not use or otherwise make available this Reference Design for any military purposes, including without limitation, for the design, development, use, stockpiling or manufacturing of nuclear, chemical, or biological weapons or missile technology products (mass destruction weapons). This Reference Design may be controlled under the applicable export laws and regulations including, without limitation, the Japanese Foreign Exchange and Foreign Trade Act and the U.S. Export Administration Regulations. Export and re-export of this Reference Design is strictly prohibited except in compliance with all applicable export laws and regulations.

Section 5. Governing Laws

This terms of use shall be governed and construed by laws of Japan, without reference to conflict of law principle.

Section 6. Jurisdiction

Unless otherwise specified, Tokyo District Court in Tokyo, Japan shall be exclusively the court of first jurisdiction for all disputes under this terms of use.

ご利用規約

本規約は、お客様と東芝デバイス＆ストレージ株式会社（以下「当社」といいます）との間で、当社半導体製品を搭載した機器を設計する際に参考となるドキュメント及びデータ（以下「本リファレンスデザイン」といいます）の使用に関する条件を定めるものです。お客様は本規約を遵守しなければなりません。

第1条 禁止事項

お客様の禁止事項は、以下の通りです。

1. 本リファレンスデザインは、機器設計の参考データとして使用されることを意図しています。信頼性検証など、それ以外の目的には使用しないでください。
2. 本リファレンスデザインを販売、譲渡、貸与等しないでください。
3. 本リファレンスデザインは、高温・多湿・強電磁界などの対環境評価には使用できません。
4. 本リファレンスデザインを、国内外の法令、規則及び命令により、製造、使用、販売を禁止されている製品に使用しないでください。

第2条 保証制限等

1. 本リファレンスデザインは、技術の進歩などにより予告なしに変更されることがあります。
2. 本リファレンスデザインは参考用のデータです。当社は、データ及び情報の正確性、完全性に関して一切の保証をいたしません。
3. 半導体素子は誤作動したり故障したりすることがあります。本リファレンスデザインを参考に機器設計を行う場合は、誤作動や故障により生命・身体・財産が侵害されることのないように、お客様の責任において、お客様のハードウェア・ソフトウェア・システムに必要な安全設計を行うことをお願いします。また、使用されている半導体素子に関する最新の情報（半導体信頼性ハンドブック、仕様書、データシート、アプリケーションノートなど）をご確認の上、これに従ってください。
4. 本リファレンスデザインを参考に機器設計を行う場合は、システム全体で十分に評価し、お客様の責任において適用可否を判断して下さい。当社は、適用可否に対する責任を負いません。
5. 本リファレンスデザインは、その使用に際して当社及び第三者の知的財産権その他の権利に対する保証又は実施権の許諾を行うものではありません。
6. 当社は、本リファレンスデザインに関して、明示的にも黙示的にも一切の保証（機能動作の保証、商品性の保証、特定目的への合致の保証、情報の正確性の保証、第三者の権利の非侵害保証を含むがこれに限らない。）をせず、また当社は、本リファレンスデザインに関する一切の損害（間接損害、結果的損害、特別損害、付随的損害、逸失利益、機会損失、休業損害、データ喪失等を含むがこれに限らない。）につき一切の責任を負いません。

第3条 契約期間

本リファレンスデザインをダウンロード又は使用することをもって、お客様は本規約に同意したものとみなされます。本規約は予告なしに変更される場合があります。当社は、理由の如何を問わずいつでも本規約を解除することができます。本規約が解除された場合は、お客様は本リファレンスデザインを破棄しなければなりません。さらに当社が要求した場合には、お客様は破棄したことを証する書面を当社に提出しなければなりません。

第4条 輸出管理

お客様は本リファレンスデザインを、大量破壊兵器の開発等の目的、軍事利用の目的、あるいはその他軍事用途の目的で使用してはなりません。また、お客様は「外国為替及び外国貿易法」、「米国輸出管理規則」等、適用ある輸出関連法令を遵守しなければなりません。

第5条 準拠法

本規約の準拠法は日本法とします。

第6条 管轄裁判所

本リファレンスデザインに関する全ての紛争については、別段の定めがない限り東京地方裁判所を第一審の専属管轄裁判所とします。