

TRANSFORMERS

Part Number	Single or Dual Core	SMD Package	Available Transformer Ratios		Packages ⁽¹¹⁾
Isolation Transformers					
PM-DB2725	Single	No	1:2.5	1:1.79	A
PM-DB2725EX	Single	No	1:2.5	1:1.79	G
PM-DB2727	Single	Yes	1:2.5	1:1.79	D
PM-DB2745	Single	No	1:2.5	1:1.79	K
PM-DB2745D	Dual	No	1:2.5	1:1.79	R
PM-DB2745L	Single	Yes	1:2.5	1:1.79	L
PM-DB2745S	Dual	Yes	1:2.5	1:1.79	S
PM-DB2745T	Dual	N/A ⁽¹³⁾	1:2.5	1:1.79	T
PM-DB2756	Dual	Yes	1:2.5	1:2.5	AB
PM-DB2762	Dual	Yes	1:2.5	1:2.5	AA
PM-DB2766	Dual	Yes	1:1.79	1:1.79	AA
PM-DB2776	Dual	Yes	1:2.5	1:1.79	AC
PM-DB2779	Dual	Yes	1:2.65	1:2.07	AC
PM-DB2785S ⁽¹²⁾	Dual	Yes	1:2.5	1:1.79	S
PM-DB2791S	Single	Yes	1:2.5	N/A	V
PM-DB2793S	Single	Yes	1:2.5	N/A	V
PM-DB2793T	Single	Yes	1:2.5	N/A	A
PM-DB2795S	Single	Yes	1:1.79	N/A	V
PM-DB2798S	Single	Yes	1:2.5	1:1.79	V
PM-DB27101	Single	No	1:2.5	1:1.79	W
PM-DB27408	Dual	No	1:2.5	1:1.79	H
Coupling Transformers					
PM-DB2702	Single	No	1:1.4	2:1	A
PM-DB2742L	Single	Yes	1:1.4	2:1	L
PM-DB2742S	Dual	Yes	1:1.4	2:1	S
PM-DB2764	Dual	Yes	1:1.41	1:1.41	AA

TRANSFORMER PACKAGES⁽⁹⁾

	SMD	Dimensions in inches ⁽¹⁰⁾ (millimeters)
A	No	0.625 x 0.625 x 0.250 (15.87 x 15.87 x 6.35)
AC	Yes	0.675 x 0.4 x 0.185 (17.145 x 10.16 x 4.699)
D	Yes	0.625 x 0.625 x 0.254 (15.87 x 15.87 x 6.45)
G	No	0.4 x 0.4 x 0.26 (10.16 x 10.16 x 6.608)
H	No	0.625 x 0.625 x 0.250 (15.87 x 15.87 x 6.35)
K	No	0.63 x 0.63 x 0.155 (16.0 x 16.0 x 3.937)
L	Yes	0.63 x 0.63 x 0.159 (16.0 x 16.0 x 4.037)
AA	Yes	0.4 x 0.4 x 0.32 (10.16 x 10.16 x 8.128)
R	No	0.93 x 0.63 x 0.155 (23.62 x 16.0 x 3.937)
S	Yes	0.93 x 0.63 x 0.159 (23.62 x 16.0 x 4.037)
T	N/A ⁽¹³⁾	0.93 x 0.43 x 0.155 (23.62 x 10.92 x 3.937)
V	Yes	0.40 x 0.40 x 0.185 (10.16 x 10.16 x 4.699)
W	No	0.43 x 0.43 x 0.155 (10.92 x 10.92 x 3.937)
AB	Yes	0.93 x 0.575 x 0.185 (23.62 x 14.605 x 4.699)

SALES REPRESENTATIVES AND DISTRIBUTORS*

USA & CANADA

ARROW ELECTRONICS
Phone: (800) 777-2776
Web: www.arrow.com

DIGI-KEY CORPORATION
Phone: +1 218 681 6674
E-Mail: Quotes@digkey.com
Web: www.digkey.com

FALCON ELECTRONICS
Phone: (800) 444-4744, ext. 1
E-Mail: sales@falconelec.com
Web: www.falconelec.com

KS, MN, IA, IL, WI, ND, SD, MO, NE
MATRIX DESIGN TECHNOLOGY
Phone: (952) 400-1070
E-Mail: info@matrix-dt.com
Web: www.matrix-dt.com

FL, PR
PRO REP SOLUTIONS, INC.
Phone: (813) 240-1553
E-Mail: rick@prorepsolutions.com
Web: www.prorepsolutions.com

SAN DIEGO, CA
JRED ASSOCIATES
Phone: (619) 884-1888
E-mail: jim@jredassociates.com
Web: www.jredassociates.com

MIDDLE EAST

ISRAEL
GITRONICS Ltd.
Phone: +972-3-9274738
E-Mail: jan@gitronics.co.il
Web: www.gitronics.co.il

AFRICA

SOUTH AFRICA
ASIC DESIGN SERVICES
Phone: +27 (0)11 315 8316
E-Mail: tony.dalmaso@asic.co.za
Web: www.asic.co.za

EUROPE

BELGIUM
TELEREX N.V.
Phone: +32 3 326 40 00
E-Mail: info@telereurope.com
Web: www.telereurope.com

FRANCE
ISOTOPE ELECTRONICS
Phone: +33 1 69 86 97 97
E-Mail: jpolivet@isotope-electronics.com
Web: www.isotope-electronics.com

GERMANY, AUSTRIA, SWITZERLAND
PROTEC, GmbH
Phone: +49 89 660 29 23
E-Mail: sales@protec-semi.de
Web: www.protec-semi.de

ITALY
META s.r.l.
Phone: +39 02 26 95 24 19
E-Mail: info@meta-srl.com
Web: www.meta-srl.com

NETHERLANDS
TELEREX NEDERLAND B.V.
Phone: +31 76 578 20 00
E-Mail: info@telereurope.com
Web: www.telereurope.com

PORTUGAL
ANATRONIC S.A.
Phone: (+351) 219 376 267
E-Mail: info@anatronic.com
Web: www.anatronic.com

RUSSIA
ELECTROMIR
Phone: +7 (495) 788-07-04
E-Mail: sales@electromir.com
Web: www.electromir.com

SPAIN
ANATRONIC S.A.
Phone: +34 91 366 01 59
E-Mail: info@anatronic.com
Web: www.anatronic.com

TURKEY

EMPA ELEKTRONIK SAN. ve TIC. A.S.
Phone: +90 212 465 71 99
E-mail: holt@empa.com
Web: www.empa.com

UNITED KINGDOM
ADVANCED POWER COMPONENTS plc
Phone: +44 1634 290588
E-Mail: sales@apc-plc.co.uk
Web: www.apc-plc.co.uk

ASIA-PACIFIC

CHINA
WALASEY LIMITED
Phone: +86 021 5109 8665
E-mail: shsales@walasey.com
Web: www.walasey.com

INDIA
BRYKA ELECTROSYSTEMS and SOFTWARE Pvt. Ltd.
Phone: +91-22-2207-4891/4892
E-Mail: sales@bryka.net
Web: www.bryka.net

JAPAN
NACELLE CO. LTD.
Phone: +81 3-5921-5099
E-Mail: sales@nacelle.co.jp
Web: www.nacelle.co.jp

SOUTH KOREA
INTERCOM ELECTRONICS, INC.
Phone: +82 31-8007-6553
E-Mail: sales@1553.co.kr
Web: www.1553.co.kr

* See Web site for complete list of regional offices.

MIL-STD-1553 PRODUCT SELECTOR GUIDE

DO-254 CERTIFIABLE

HOLT INC.
INTEGRATED CIRCUITS

23351 Madero, Mission Viejo, California 92691-2730 USA
Tel: (949) 859-8800 Fax: (949) 859-9643
E-mail: sales@holtic.com Web: www.holtic.com

BSI
PM 53456

stack
International

PURE

HOLT-12043 1/16-2.5M

TRANSCEIVERS

Part Number	Tx/Rx Channels	Supply Voltage	MIL-STD-1760 Compliant	Variable Transmitter Output Amplitude	Packages ⁽¹⁾	Isolation Transformer Ratio
Transceivers						
HI-1565 (HI-1566 ⁴)	Dual	5V	Yes	No	1, 2, 14	1: 1.79 ⁽²⁾
HI-1570	Dual	5V	Yes	Yes	1, 2, 14	1: 1.79 ⁽²⁾
HI-1590	Dual	3.3V	Yes	Yes	1, 20	1:2.5
HI-1573 (HI-1574 ⁴)	Dual	3.3V	No	No	1, 2, 14	1:1.79 ⁽²⁾
HI-1579 (HI-1581 ⁴)	Dual	3.3V	Yes	No	1, 2, 14	1:2.5
HI-1582	Single	3.3V	Yes	No	10	1:2.5
HI-1584	Dual	3.3V	Yes	No	11	1:2.07 ⁽³⁾
HI-1585	Dual	3.3V	Yes	No	12	1:2.07 ⁽³⁾
HI-2579 (HI-2581 ⁴)	Dual	3.3V	Yes	No	15	Integrated
Smart Transceiver (Integrated Encoder/Decoders)						
HI-1575	Dual	3.3V	No	No	3, 4	1:2.5
Encoder/Decoders						
HI-15530	-	3.3V & 5V	N/A	N/A	5, 16, 17	N/A

NOTES:

- See IC Packages.
- Transformer coupled assumed. For direct coupled applications, use 1:2.5 ratio.
- Transformer coupled assumed. For direct coupled applications, use 1:2.65 ratio.
- Receiver outputs will be a logic "1" when MIL-STD-1553 bus is idle.
- Hermetic package.
- Requires external RS-485 transceivers (recommend HI-4853 20Mbps transceiver).
- 24K x 16 when EDC is enabled.
- Also available in PGA-121.
- Contact your local sales representative for RoHS compliant (lead-free) options.
- Dimensions refer to approximate footprint and height when mounted, "L x W x H". Guideline only. Data sheet dimensions should be used for design purposes.
- See Transformer Packages.
- Dielectric withstand (Hi-Pot test) 1500Vrms.
- Leads not formed.

INTEGRATED TERMINALS

Part Number	Tx/Rx Channels	Terminal Type	Concurrent Terminal Operation	Supported Standards	Data Rate	Internal Analog Transceivers	Integrated Transformers	Isolation Transformer Ratio	IRIG-106 MT Mode	Host Interface	RAM	RAM Error Handling	Packages ⁽¹⁾
3.3V Integrated Terminals													
MAMBA™ HI-6138	2	BC/RT/MT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	40MHz SPI	8K x 17	Parity	12,13
MAMBA™ HI-6137	2	BC/RT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	40MHz SPI	8K x 17	Parity	12,13
MAMBA™ HI-6136	2	RT/MT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	40MHz SPI	8K x 17	Parity	12,13
MAMBA™ HI-6135	2	RT	N/A	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	40MHz SPI	8K x 17	Parity	12,13
HI-6130	2	BC/MT/2RT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	Yes	16-bit parallel	32K x 16 ⁽⁷⁾	Detection/Correction	6
HI-6131	2	BC/MT/2RT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	Yes	20MHz SPI	32K x 16 ⁽⁷⁾	Detection/Correction	7, 8
HI-6132 ⁽⁵⁾	2	BC/MT/2RT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	Yes	16-bit parallel or 20MHz SPI	32K x 16 ⁽⁷⁾	Detection/Correction	18 ⁽⁸⁾
HI-6120	2	RT	N/A	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	16-bit parallel	32K x 16	None	6
HI-6121	2	RT	N/A	AS4111, 1553B, 1760	1 Mbps	Yes	No	1:2.5	No	20MHz SPI	32K x 16	None	8, 9
HI-2130	2	BC/MT/2RT	Yes	AS4111, 1553B, 1760	1 Mbps	Yes	Yes	Integrated	Yes	16-bit parallel or 20MHz SPI	32K x 16 ⁽⁷⁾	Detection/Correction	19 ⁽⁸⁾
HI-6140	2	BC/MT/RT	Yes	AS5652, EBR-1553 / MMSI	10 Mbps	No ⁽⁶⁾	No	N/A	No	16-bit parallel	32K x 16 ⁽⁷⁾	Detection/Correction	6
HI-6110	2	BC/MT/RT single-message processor	No	AS4111, 1553B	1 Mbps	Yes	No	1:2.5	No	16-bit parallel	16-bit x 32-word Tx/Rx FIFO	None	8, 9

IC PACKAGES⁽⁹⁾

	Plastic	Package	Dimensions in inches ⁽¹⁰⁾
1		QFN-44	0.276 x 0.276 x 0.039 (7.0 x 7.0 x 1.0)
2		ESQIC-20	0.504 x 0.407 x 0.094 (12.79 x 10.325 x 2.281)
3		QFN-40	0.236 x 0.236 x 0.039 (6.0 x 6.0 x 1.0)
4		QFP-32	0.354 x 0.354 x 0.047 (9.0 x 9.0 x 1.2)
5		SSOP-24	0.323 x 0.307 x 0.078 (8.2 x 7.8 x 1.99)
6		QFP-100	0.63 x 0.63 x 0.059 (16.0 x 16.0 x 1.5)
7		QFP-64	0.473 x 0.473 x 0.063 (12 x 12 x 1.6)
8		QFN-64	0.354 x 0.354 x 0.039 (9.0 x 9.0 x 1.0)
9		QFP-52	0.52 x 0.52 x 0.106 (13.2 x 13.2 x 2.7)
10		QFN-32	0.276 x 0.276 x 0.039 (7.0 x 7.0 x 1.0)
11		QFN-48	0.276 x 0.276 x 0.031 (7.0 x 7.0 x 0.8)
12		QFN-48	0.236 x 0.236 x 0.039 (6.0 x 6.0 x 1.0)
13		QFP-48	0.354 x 0.354 x 0.063 (9.0 x 9.0 x 1.6)
	Ceramic	Package	Dimensions in inches ⁽¹⁰⁾
14		Ceramic S/B DIP-20	1.22 x 0.610 x 0.2 (30.988 x 15.494 x 5.080)
15		CerLCC-24	0.845 x 0.485 x 0.166 (21.46 x 12.32 x 4.22)
16		Ceramic S/B DIP-24	1.22 x 0.610 x 0.2 (30.988 x 15.494 x 5.080)
17		CerLCC-28	0.451 x 0.451 x 0.08 (11.455 x 11.455 x 2.032)
18		BGA-121	0.59 x 0.59 x 0.11 (14.986 x 14.986 x 2.795)
19		BGA-121	0.642 x 0.642 x 0.217 (16.3 x 16.3 x 5.49)
20		Ceramic S/B DIP-28	1.40 x 0.61 x 0.20 (35.56 x 15.494 x 5.08)