

4 July 2008

**Avago Technologies
Product Material Declaration (Certificate of Compliance)**

A) The following products are RoHS compliant:

Summary of Avago Technologies compliance Products (4 July 2008, Rev03)

Avago p/n	Product Description	Compliant after Date / Date code:
HRPG-xxxx	Miniature Panel Mount Optical Encoders and digital potentiometers	WW0523
HEDR-542x	Mid-Sized Housed Encoder	WW0527
HEDL-55xx	Encoder Line Drivers	WW0540
HEDL-56xx		
HEDM-55xx	Quick Assembly Two and Three Channel Optical Encoder	WW0523
HEDM-56xx	Quick Assembly Two and Three Channel Optical Encoder	WW0523
HEDS-55xx		
HEDS-56xx		
HEDL-65xx	Large Diameter (56mm), Housed Two and Three Channel Optical Encoders	WW0440
HEDM-65xx		
HEDS-65xx		
AEDA-32xx	Ultra Miniature, High Resolution Incremental Encoder Module	WW0518
AEDB-9340-xxx	6-Channel Optical Incremental Encoder Bundled with Codewheel	WW0634
AEDS-96xx	Ultra small Optical Encoder Modules	WW0401
HEDL-90xx	Encoder Line Drivers	WW0523
HEDS-90xx	Optical Incremental Encoder Modules	WW0523
HEDS-91xx		
HEDS-92xx	Linear Optical Incremental Encoder Modules	WW0523
HEDS-97xx	Small Optical Encoder Modules	WW0601
HEDS-9733#U54	Small Optical Encoder Modules	WW0523
AEDB-9xxx	Cost Effective, Miniature Optical Incremental Encoder Module Series, 100 to 500 CPR	WW0549
HEDB-9xxx	Two and Three Channel encoder and codewheel, Optical Radius bundled pack	WW0549
AEAS-7500-xxx	Component Based Absolute Encoder	WW0501
AEAS-7000-xxxxx	Ultra-Precision Absolute Encoder	WW0501
AEAS-84AD-xxxxx	Multi-Turn Absolute Encoder	WW0523

	Module, 12-bit	
AEAT-84AD-xxxxx	High Temp Multiturn Absolute Encoder Module, 12-bit	WW0523
AEAT-86AD-xxxxx	High Temp Multi-turn Encoder Module with Built-in Controller	WW0523
HEDR-512x	Two Channel Reflective Codewheels	WW0532
HEDS-512x		
HEDS-514x		
HEDS-61xx		
HEDM-51xx		
HEDM-61xx		
HEDG-51xx	Two and Three Channel Codewheels	WW0540
HEDG-61xx		
AEDS-93xx	Transmissive Photointerrupter	WW0635
HEDR-5900-xxxxx	Centering Tool For Pele Encoder (HEDR-54XX Series)	WW0536
HEDS-6510-xxx	Large Diameter (56mm), Housed Two and Three Channel Optical Encoders	WW0401
HEDS-8901	28mm Gap Setting Tool For Hi-resolution Zipper1 (HEDS-91XX Series)	WW0401
HEDS-8940	AEDA-32xx alignment tool	WW0626
HEDS-8952	Alignment tool for AEDB-9340 series 1250/2500 CPR	WW0635
HEDS-8902	2-channel Wire Assembly	WW0401
HEDS-8903	3-channel Wire Assemble	WW0436
HEDS-8904	Locking Connector Housing	WW0401
HEDS-8933	AEAS-7000 alignment tool	WW0701
HEDT-9001#A00	High Temperature 125 degrees C Two Channel Optical Incremental Encoder Modules	WW0619
HEDT-9100#A00		
HEDT-9100#C00		
HEDT-9100#E00		
HEDT-9100#G00		
HEDT-9100#I00		
HEDT-9101#A00		
HEDT-9101#C00		
HEDT-9101#D00	High Temperature 125 degrees C Two Channel Optical Incremental Encoder Modules	WW0619
HEDT-9101#E00		
HEDT-9101#G00		
HEDT-9101#I00		
HEDT-9140#I00	High Temperature 140 degrees C Three Channel Optical Incremental Encoder Modules	WW0523
HEDT-9141#I00		
HCTL-2001	Quadrature Decoder/Counter Interface ICs	WW0627
HCTL-2001-A00	Quadrature Decoder/Counter Interface ICs	WW0610
HCTL-2017	Quadrature Decoder/Counter	WW0627

	Interface ICs	
HCTL-2017-A00	Quadrature Decoder/Counter Interface ICs	WW0610
HCTL-2017-PLC	Quadrature Decoder/Counter Interface ICs	WW0627
HCTL-2021	Quadrature Decoder/Counter Interface ICs	WW0627
HCTL-2021-A00	Quadrature Decoder/Counter Interface ICs	WW0610
HCTL-2021-PLC	Quadrature Decoder/Counter Interface ICs	WW0627
HCTL-2022	Quadrature Decoder IC	WW0610
HCTL-2032	Quadrature Decoder IC	WW0610
HCTL-2032-SC	Quadrature Decoder IC	WW0627
HCTL-1100	General Purpose Motion Control ICs	WW0610
HCTL-1100#PLC	General Purpose Motion Control ICs	WW0627
AEDR-8000-1K0	Reflective Optical Encoder	WW0523
AEDR-8000-1K1		
AEDR-8000-1K2		
AEDR-8010-1K2		
AEDR-8100-1P0		
AEDR-8100-1P1		
AEDR-8100-1P2		
AEDR-8100-1Q0		
AEDR-8100-1Q1		
AEDR-8300-1K0		
AEDR-8300-1K1		
AEDR-8300-1K2		
AEDR-8300-1P0		
AEDR-8300-1P1		
AEDR-8300-1P2		
AEDR-8300-1Q0		
AEDR-8300-1Q1		
AEDR-8300-1Q2		
AEDR-8300-1W0		
AEDR-8300-1W1		WW0623
AEDR-8300-1W2		WW0523
AEDR-8310-1K0		
AEDR-8310-1K1		
AEDR-8310-1K2		
AEDR-8310-1V0		
AEDR-8310-1V1		
AEDR-8310-1V2		
AEDR-8400-130		WW0612
AEDR-8400-132		

AEDB-9340-L13C	6-Channel Optical Incremental Encoder Bundled with Code wheel	WW0634		
AEDB-9340-W13C				
AEDS-9340-L00	6-Channel Optical Incremental Encoder			
AEDS-9340-W00				
AEDB-9140-A02	Cost Effective, Miniature Optical Incremental Encoder Module Series, 100 to 500 CPR	WW0549		
AEDB-9140-A04				
AEDB-9140-A05				
AEDB-9140-A06				
AEDB-9140-A11				
AEDB-9140-A12				
AEDB-9140-A13				
AEDB-9140-A14				
AEDB-9140-C04				
AEDB-9140-C06				
AEDB-9140-C12				
AEDB-9140-C13				
AEDB-9140-E06				
AEDB-9140-E11				
AEDB-9140-E12				
AEDB-9140-E14				
AEDB-9140-F04				
AEDB-9140-F12				
AEDB-9140-F14				
AEDB-9140-G06				
AEDB-9140-G12				
AEDB-9140-G14				
AEDB-9140-H06				
AEDB-9140-H14				
AEDB-9340-L13C	6-Channel Optical Incremental Encoder Bundled with Codewheel	WW0634		
AEDB-9340-W13C				
AEDA-3300-BA4	Ultra Miniature, High Resolution Incremental Kit Encoder	WW0541		
AEDA-3300-BA6				
AEDA-3300-BA7				
AEDA-3300-BAB				
AEDA-3300-BAC				
AEDA-3300-BAM				
AEDA-3300-BAQ				
AEDA-3300-BAT				
AEDA-3300-TA4				
AEDA-3300-TA6				
AEDA-3300-TA7				
AEDA-3300-TAB				
AEDA-3300-TAC				
AEDA-3300-TAM				
AEDA-3300-TAQ				
AEDA-3300-TAT				
AEDA-3300-BAJ				
AEDA-3300-BB1				
				WW0605

AEDA-3300-BB7		
AEDA-3300-BBJ		
AEDA-3300-BBK		
AEDA-3300-BBM		
AEDA-3300-BBN		
AEDA-3300-BC1		
AEDA-3300-BC3		
AEDA-3300-BCH		
AEDA-3300-BCX		
AEDA-3300-BDM		
AEDA-3300-BE1		
AEDA-3300-TAJ		
AEDA-3300-TB1		
AEDA-3300-TB7		
AEDA-3300-TBJ		
AEDA-3300-TBK		
AEDA-3300-TBM		
AEDA-3300-TC1		
AEDA-3300-TC3		
AEDA-3300-TCX		
AEDA-3300-TDM		
AEDA-3300-TE1		

Note:

(1) "x", "xx", "xxx", "xxxx" and "xxxxx" in part number and suffix option denotes alphanumeric character, representing generic part number.

This document certifies that the components of the part numbers identified above and manufactured by Avago Technologies are in compliance with Directive 2002/95/EC of the European Parliament, in accordance with the definitions therein, and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronics equipment (RoHS Directives).

B) Absence of Hazardous Substances

Our material composition policy is to declare all substances intentionally added in our products. Additionally we confirm the following regulated substances known to be in electronics are not intentionally added or knowingly present in our semiconductor products:

Asbestos, Azo Colorants, Cadmium and its compounds, Hexavalent Chromium and its compounds, Mercury and its compounds, Ozone Depleting Substances (CFCs, HCFCs, HBFCs, carbon tetrachloride, etc.), Tributyl Tin Oxide (TbTO), Tributyl Tin (TbT) and Triphenyl Tin (TPT), Polychlorinate Biphenyls (PCBs), Polychlorinate Terphenyls (PCTs), Polychlorinated Naphthalenes (more than 3 chlorine atoms), Short chain Chlorinated Paraffins (SCCPs), Polybrominated biphenyls (PBBs), Polybrominated diphenylethers (PBDEs) **including Deca BDE** and Radio-active Substances

For product availability and compliance information, please contact Avago distributors or Avago Sales & Marketing via rohs.enquiry-spg@avagotech.com. For product technical information (termination finish, temperature profile, product substance content etc.) please contact: pb-free.spg@avagotech.com.

This document further certifies that the materials declaration provided above by Avago Technologies is accurate.



AVAGO Technologies Product Stewardship
Malaysian Contact: Chan Gum Meng
Bayan Lepas FIZ Phase 3, 11900 Penang, Malaysia
E-mail: gum-meng.chan@avagotech.com
Malaysian contact: 604-610-5615

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