

### Certification for RoHS Compliance

Our company hereby certifies that integrated circuit products (ICs) manufactured by VLSI Solution Oy comply with the **European Parliament and the Council Directive 2011/65/EU (and Directive (EU) 2015/863) on the Restriction of the use of certain Hazardous Substances in the Electrical and Electronic Equipment (RoHS), which replaced EU directive 2002/95/EC.**

Maximum permissible concentration of the substances in a single product:

Substance	Maximum concentration
Lead (Pb)	1000 ppm
Mercury (Hg)	1000 ppm
Cadmium (Cd)	100 ppm
Hexavalent Chromium (Cr <sup>6+</sup> )	1000 ppm
Poly Brominated Biphenyls (PBB)	1000 ppm
Poly Brominated Diphenyl Ethers (PBDE)	1000 ppm
Bis(2-ethylhexyl)phthalate (DEHP)	1000 ppm
Benzyl butyl phthalate (BBP)	1000 ppm
Dibutyl phthalate (DBP)	1000 ppm
Diisobutyl phthalate (DIBP)	1000 ppm

List of devices covered by this Certificate:

(The older devices, that are not on the list, have separate RoHS certificates)

Device name of VLSI	Device name marked on delivery labels by assembly and test company	Package
VS1000D-L	VS1000D/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1003B-L	VS1003B/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1003B-B	VS1003B-B/LSR-ROHS	FBGA 49 7X7X1.45 MM or FBGA 49 7X7X1.17 MM
VS1011E-L	VS1011E/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1011E-S	VS1011E-S/LSR-ROHS	SOIC 28 300 MILS
VS1053B-L	VS1053B/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS8053B-L	VS8053B/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1063A-L	VS1063A/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1163A-L	VS1163A/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS8063A-L	VS1063A/LSR-ROHS	LQFP 48 7X7X1.4 MM
VS1005G-Q	VS1005G-Q	QFN 88 10x10x0.75 MM
VS1005G-F-Q	VS1005G-F-Q	QFN 88 10x10x0.75 MM
VS1205G-Q	VS1205G-Q	QFN 88 10x10x0.75 MM
VS1205G-F-Q	VS1205G-F-Q	QFN 88 10x10x0.75 MM
VS1010D-Q	VS1010D-Q	VQFN 68 8x8x0.9 MM
VS23S010D-L	VS23S010D-L	LQFP 48 7X7X1.4 MM
VS23S010D-S	VS23S010D-S	SOIC 8 150 MILS
VS23S040D-B	VS23S040D-B	BGA 24 5x5x1.297 MM

Yours truly,



Teppo Karema, CEO

#### **DISCLAIMER**

*This declaration and its accuracy are made solely based on available information and analytical data provided by our suppliers.*