



RoHS Certificate of Compliance

Yoctopuce hereby certifies that it has assessed the compliance of the product **YoctoHub-Ethernet** (*YHUBETH1*) with the requirements of European Directive 2011/65/UE with amendment 2015/863 according to the methodology recommended by the IEC 63000:2016 Standard "*Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances*", in conformity with Module A of Decision 768/2008/EC.

For each and every component used to build the **YoctoHub-Ethernet**, Yoctopuce has obtained from the manufacturer a document that demonstrates the compliance with the directive. The quality and trustworthiness of the documents has been evaluated, and additional information has been requested in case of doubt on the thoroughness of the documents or on the manufacturer's knowledge of the directive. Wherever evidence was lacking, components have been replaced by similar components from other manufacturers compliant with the directive.

Based on the collected evidence, Yoctopuce certifies that the **YoctoHub-Ethernet** is compliant with the restricted substance requirements of European Directive RoHS 2015/863, using the following exemptions:

- 7(a): Lead in high melting temperature type solders
- 7(c)-I: Electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors

For all intents and purposes, the complete list of components and materials currently used is attached, with an indication of the directive version taken into account by the manufacturer, the type of the supporting document, and the list of exemptions required for each component. Whenever alternative components have been used in the past, variants are also listed separately. This document is therefore updated on a regular basis.

Yoctopuce keeps abreast of the legislative adaptations, in particular concerning the evolution of and the renewal of expiring exemptions. If need be, the products will be adapted according to the new standards.

Cartigny, 4 November 2020

Marc Vuilleumier Stükelberg
Partner

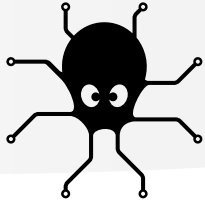


Exhaustive list of components and materials currently used to build the YoctoHub-Ethernet

Component	Manufacturer	Type	Compliance	Exemptions	Evidence
AA2214QBS/D	Kingbright	Blue LED	RoHS 2015/863	-	Manufacturer Certificate of Compliance
06031C103JAT2A	AVX (Kyocera)	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
502R29W471KV3E-****-SC	Johanson dielectrics	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
C0603C102K5RACTU	Kemet	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
C0603C682K5RACTU	Kemet	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
ESK108M6R3AG3AA	Kemet	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
C1608X6S1A106M080AC	TDK	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
C2012X7R2E472K085AA	TDK	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
CGA3E2C0G1H120J	TDK	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
EMK107BB7225KA-T	Taiyo Yuden	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
EMK316B7106KL-TD	Taiyo Yuden	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
LMK107B7105KA-T	Taiyo Yuden	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
LMK212BC6226MG-T	Taiyo Yuden	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
860_040_573_004	Würth Electronic	Capacitor	RoHS 2015/863	-	Analytical test results
885_012_206_071	Würth Electronic	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
ZX62-B-5PA(33)	Hirose	Connector	RoHS 2015/863	-	Manufacturer Certificate of Compliance
90325-3010	Molex	Connector	RoHS 2015/863	-	Manufacturer Certificate of Compliance
653_005_114_822	Würth Electronic	Connector	RoHS 2015/863	-	Manufacturer Certificate of Compliance
7499210124A	Würth Electronic	Connector	RoHS 2015/863	7(a), 7(c)-I	Manufacturer Certificate of Compliance
FAN4010L6X_F113	Fairchild (On Semiconductor)	Current sensor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
Ag9905MT	Silvertel	DC/DC converter	RoHS 2015/863	7(a)	Manufacturer Certificate of Compliance
PCA9554ABS	NXP semiconductor	Digital IC	RoHS 2015/863	-	Manufacturer Material Declaration
BAT54CWT1G	ON Semiconductor	Diode	RoHS 2015/863	-	Manufacturer Material Declaration
MMZ2012S102A	TDK	EMI filter	RoHS 2015/863	-	Manufacturer Certificate of Compliance
IS25LP064A-JKLE-TR	ISSI	Flash memory	RoHS 2015/863	-	Manufacturer Certificate of Compliance
SELECT-10	Kester	Flux	RoHS 2015/863	-	Analytical test results
AA2214ZGS	Kingbright	Green LED	RoHS 2015/863	-	Manufacturer Certificate of Compliance
MCP1703T-3302E/CB	Microchip	LDO regulator	RoHS 2015/863	-	Manufacturer Material Declaration
MCP1703T-3302E/MC	Microchip	LDO regulator	RoHS 2015/863	-	Manufacturer Material Declaration
ASFLMB-25.000MHZ-LR-T	Abracorn	MEMS Oscillator	RoHS 2015/863	-	Manufacturer Certificate of Compliance
ENC424J600-I/ML	Microchip	Network module	RoHS 2015/863	-	Manufacturer Material Declaration
DMP3098L-7	Diodes Incorporated	P-FET	RoHS 2015/863	-	Manufacturer Certificate of Compliance
SIA923AEDJ-T1-GE3	Vishay	P-FET	RoHS 2015/863	-	Manufacturer Certificate of Compliance
FR4-ENIG	TOM-iC	PCB	RoHS 2015/863	-	Manufacturer Certificate of Compliance
PIC24FJ256DA206-I/MR	Microchip	Processor	RoHS 2015/863	-	Manufacturer Material Declaration
AA2214SURSK	Kingbright	Red LED	RoHS 2015/863	-	Manufacturer Certificate of Compliance
RK73H1JTTD10R0F	KOA speer electronics	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RK73H1JTTD1242F	KOA speer electronics	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
ERJ-PA3F2490V	Panasonic	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
AC0603FR-074K7L	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
PE0603FRF470R1L	Yageo	Resistor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
RC0603FR-07100KL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-07100RL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-0710KL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-07180RL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-071K5L	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-071KL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-071ML	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-0747KL	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RC0603FR-0749R9L	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RT0603BRD07470RL	Yageo	Resistor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
04-7068-0000	Kester	SAC305 bar	RoHS 2015/863	-	Manufacturer Certificate of Compliance
24-7068-7603	Kester	SAC305 wire	RoHS 2015/863	-	Manufacturer Certificate of Compliance
SB6N58-M500SI	KOKI	Solder paste	RoHS 2015/863	-	Manufacturer Certificate of Compliance
KMR211NGLFS	C&K Components	Switch	RoHS 2015/863	-	Manufacturer Certificate of Compliance

Alternate components that may have been used in the past to build the YoctoHub-Ethernet

Component	Manufacturer	Type	Compliance	Exemptions	Evidence
ASMT-TBBM-NP902	Avago (Broadcom)	Blue LED	RoHS 2011/65/UE	-	Compliance statement
1808HC471KAT2A	AVX (Kyocera)	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
C0603C106M9PACTU	Kemet	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
GRM188R60J105KA01D	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance



GRM188R61C225KE15D	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
GRM188R71E104KA01D	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
GRM21BR60J226ME39L	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
GRM31CR61C106KA88L	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
GRT21BC81A226ME13L	Murata	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
EEU-FR1E101	Panasonic	Capacitor	RoHS 2011/65/UE	-	Manufacturer Certificate of Compliance
C2012X7R2E472KT5	TDK	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
EMK107BC6106MA-T	Taiyo Yuden	Capacitor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
ZX62-B-5PA(11)	Hirose	Connector	RoHS 2011/65/UE	-	Compliance statement
BAT54C	Fairchild (On Semiconductor)	Diode	RoHS 2015/863	-	Manufacturer Certificate of Compliance
S25FL164K0XNFI013	Cypress	Flash memory	RoHS 2015/863	-	Manufacturer Certificate of Compliance
W25Q32JVZPIQ	Winbond	Flash memory	RoHS 2015/863	-	Manufacturer Certificate of Compliance
ASMT-TGBM-NT502	Avago (Broadcom)	Green LED	RoHS 2011/65/UE	-	Compliance statement
SIA923EDJ-T1-GE3	Vishay	P-FET	RoHS 2015/863	-	Manufacturer Certificate of Compliance
TLSM1060(T18)	Toshiba	Red LED	Yes, no details	-	Compliance statement
Ag9905-M	Silvertel	Regulator	RoHS 2011/65/UE	7(a)	Manufacturer Certificate of Compliance
RK73H1JTDD1501F	KOA speer electronics	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
RK73H1JTDD1800F	KOA speer electronics	Resistor	RoHS 2011/65/UE	7(c)-I	Manufacturer Certificate of Compliance
RK73H1JTDD4702F	KOA speer electronics	Resistor	RoHS 2011/65/UE	7(c)-I	Manufacturer Certificate of Compliance
RK73H1JTDD49R9F	KOA speer electronics	Resistor	RoHS 2011/65/UE	7(c)-I	Manufacturer Certificate of Compliance
CRCW0603100KFKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW0603100KJNEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW0603100RFKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW0603100RJNEB	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW060310K0FKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW060310K0JNEB	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW06031K00FKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW06031K00JNEB	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW06031M00FKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW06031M00JNEB	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
CRCW0603470RFKEA	Vishay	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance
WSLP0603R1000FEA	Vishay	Resistor	RoHS 2015/863	-	Manufacturer Certificate of Compliance
301-4.7K-RC	Xicon Passive Components	Resistor	Yes, no details	7(c)-I	Compliance statement
RC0603FR-074K7L	Yageo	Resistor	RoHS 2015/863	7(c)-I	Manufacturer Certificate of Compliance