SALTO
inspired access

Date: June 10th 2019

to:	from:
Regulatory Certification Body DEKRA Testing and Certification, S.A.U. Parque Tecnológico de Andalucía C/ Severo Ochoa 2 & 6 29590 Campanillas Málaga, España	**SALTO Systems, S.L.** C/Arkotz, 9, Pol. Lanbarren Oiartzun (Guipuzkoa) 20180 Spain

Related to product:

Type of equipment:	Electronic Reader Series including all mechanical variants
Brand name:	XS4 Wall Reader 2.0 with Keypad and Wall Reader-Fingerprint
Model:	WRD0BK, WRD0JK, WRD0BF and WRD0JF
FCC ID:	UKCWRD0BK
IC:	10088A-WRD0BK

Re: Family declaration letter.

We hereby declare that these 4 Readers, WRD0BK, WRD0JK, WRD0BF and WRD0JF are a family of product with RF capabilities.

Our request is to certify the NFC interface present on the 4 products.

Family	XS4 Wall Reader 2.0 with Keypad and Wall Reader-Fingerprint		
	models	**SW version**	**Characteristics**
Family members	WRD0BK (type reference: P1620)	0152 (Control Firmware) + 0136 (BGM111 Firmware)	*"MiFare"* NFC chipset PN512 @13.56 MHz Modulations ISO-14443 and ISO 15693 Bluetooth module BGM111
	WRD0JK (type reference: P1620)	0153 (Control Firmware) + 0136 (BGM111 Firmware)	*"iClass"* NFC chipset PN512

		@13.56 MHz Modulations ISO-14443 and ISO-15693 Bluetooth module BGM111
WRD0BF (type reference: P1620)	0152 (Control Firmware) + 0136 (BGM111 Firmware)	*"MiFare"* NFC chipset PN512 @13.56 MHz Modulations ISO-14443 and ISO 15693 Bluetooth module BGM111
WRD0JF (type reference: P1620)	0153 (Control Firmware) + 0136 (BGM111 Firmware)	*"iClass"* NFC chipset PN512 @13.56 MHz Modulations ISO-14443 and ISO-15693 Bluetooth module BGM111

Same construction WRD0BK and WRD0JK. Same construction WRD0BF and WRD0JF.

One additional iClass ROM in WRD0JK and WRD0JF to allow reading of *iClass* cards.
No affectation to RF characteristic.

These 4 devices integrate the same chipset from NXP Semiconductors to provide NFC communication capabilities.

All of them have Bluetooth LE capacity provided by an already FCC and ISED certified module (module BGM111, FCC ID: QOQBGM111, IC: 5123A-BGM111)

They all 4 models are aesthetically almost the same in their external appearance. The 2 readers with the fingerprint scanner are a bit different.
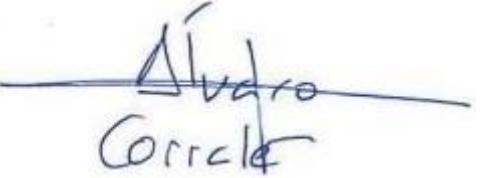
Models WRD0JK and WRD0JF have a couple more components soldered in the PCB, with respect to their B counterparts, which have nothing to do with the radio system.

We refer to WRD0BK and WRD0BF as *"MiFare"* and to WRD0JK and WRD0JK as *"iClass"*. This is due to the models WRD0JK and WRD0JF being able to read a special kind of "HiD cards" which encode their information in a specific way.

To do this, a memory chip called "iClass processor" is installed in models WRD0JK and WRD0JF. Hence both J models can read the aforementioned "HiD cards" while B models cannot.

This extra component does not affect the radio performance in any way. Modulations are the same, frequency range, carrier, current, the antenna …

Sincerely,

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