159 Ort Lane
Merlin, OR, US 97532
Phone: + 1 541 471 6256
Fax: + 1 541 471 6251
www.linxtechnologies.com

October 9, 2014

To: All customers using the RXD-315-KH2, RXD-418-KH2 and RXD-433-KH2

Re: Product Change Notice

Dear customer,

Linx Technologies is announcing the End of Life for the RXD-***-KH2 product line and the introduction of the RXM-***-KH3 product line.

The end of life is a result of the discontinuance of critical components from Holtek®. The KH3 product line incorporates the Linx DS Series Encoder/Decoder IC, providing backwards compatibility for the majority of KH2 applications.

We are committed to working closely with our customers during the transition to address any questions or concerns.

Product Change Notice for RXD-315-KH2, RXD-418-KH2 or RXD-433-KH2

PCN #: LPCN-141009-1

Publish Date: October 9, 2014

Type of Change

End of life notice for the KH2 receiver product line and introduction of the KH3 receiver product line.

Products Affected

RXD-315-KH2 RXD-418-KH2 RXD-433-KH2

Description of Change

The HT658 Decoder used in the previous version of the KH2 receiver product line has gone end-of-life by the manufacturer (Holtek®). The KH2 receiver product line has been redesigned to incorporate the Linx DS Series Encoder/Decoder, and is being introduced as the KH3 receiver product line. The design change provides for backwards compatibility with existing fielded devices using the Holtek® dip switch addressing scheme.

The new generation of product offers additional functionality and optional configuration pins, resulting in a new naming convention for the product line. The KH3 product will fit in the PCB footprint for those customers who have followed Linx recommended layout guidelines for the KH2 product – the additional pins would be unused and non-connected.

Reason for Change

Component end-of-life.

Effect of Change

Form: 3 additional pins added to support address interpretation
Fit: No change to overall module size
Function: No support for tri-state addressing
Quality: No change

Anticipated First Ship Date

Samples available October 2014

Qualification Data

Qualification plan specifics are not for general release. Please contact Linx directly for additional information or assistance.

Last Time Buy Date

No formal last time buy date is established.

159 Ort Lane
Merlin, OR, US 97532
Phone: + 1 541 471 6256
Fax: + 1 541 471 6251
www.linxtechnologies.com

Specification Comparison

ELECTRICAL SPECIFICATIONS		RXM-***-KH3			RXD-***-KH2			Units	Notes
POWER SUPPLY		**Min.**	**Typical**	**Max.**	**Min.**	**Typical**	**Max.**		
Operating Voltage	V_{CC}	2.7	3.0	3.6	2.7	3.0	3.6	VDC	-
With Dropping Resistor		4.5	5.0	5.2	4.3	5.0	5.2	VDC	1,4
Supply Current	I_{CC}	4.0	5.2	7.0	4.0	5.2	7.0	mA	-
Power-Down Current	I_{PDN}	40		57	20.0	28.0	35.0	µA	4
RECEIVER SECTION									
Receive Frequency	F_C								
RXM/D-315-KH3/2			315			315		MHz	-
RXM/D-418-KH3/2			418			418		MHz	-
RXM/D-433-KH3/2			433.92			433.92		MHz	-
Center Frequency Accuracy		-50	-	+50	-50	-	+50	kHz	-
LO Feedthrough			-80			-80		dBm	2,4
IF Frequency	F_{IF}		10.7			10.7		MHz	4
Noise Bandwidth	N_{3DB}		280			280		kHz	-
Data Rate		100		10,000	100		10,000	bps	-
Receiver Sensitivity		-106	-112	-118	-106	-112	-118	dBm	4
RSSI/Analog									
Dynamic Range			80			80		dB	4
Analog Bandwidth		50		5,000	50		5,000	Hz	4
Gain			16			16		mV/dB	4
Voltage with no Carrier			1.5			1.5			4
ANTENNA PORT									
RF Output Impedance	R_{IN}		50			50		Ω	4
Timing									
Receiver Turn-On Time:									
Via V_{CC}		3.0	7.0	10.0	3.0	7.0	10.0	msec	4,5
Via PDN		0.04	0.25	0.50	0.04	0.25	0.50	msec	4,5
Decoded Output									
Via V_{CC}			258					msec	4,5
Via PDN			138					msec	4,5
Max Time Between Transitions			10.0			10.0		msec	4
ENCODER									
Data Length	-								
Holtek® Protocol			26 bits 3x			26 bits 3x			
DS Serial Protocol						-		-	
Average Duty Cycle	-	-	50%	-	-	50%	-	-	
Decoder Oscillator	F_{DEC}	-	N/A	-	-	70	-	kHz	

159 Ort Lane
Merlin, OR, US 97532
Phone: + 1 541 471 6256
Fax: + 1 541 471 6251
www.linxtechnologies.com

Data Input									
Logic Low	V_{IL}	0	-	0.2xV_{CC}	0	-	0.2xV_{CC}	VDC	4
Logic High	V_{IH}	V_{CC}x0.8	-	V_{CC}	V_{CC}x0.8	-	V_{CC}	VDC	4
Power-Down Input									
Logic Low	V_{IL}			0.4			0.4	VDC	
Logic High	V_{IH}	V_{CC}-0.4			V_{CC}-0.4			VDC	
Output Drive Current	-	0.6	1.0	1.2	0.6	1.0	1.2	mA	6
ENVIRONMENTAL									
Operating Temperature Range	-	-30	-	+70	-30	-	+70	°C	4

Notes:

1. The KH2(3) can utilize a 4.3(5) to 5.2 VDC supply provided a 330-ohm resistor is placed in series with VCC.
2. Into a 50-ohm load
3. When operating from a 5 VDC source, it is important to consider that the output will swing to well less than 5 volts as a result of the required dropping resistor. Please verify that the minimum voltage will meet the high threshold requirement of the device to which data is being sent
4. Characterized, not tested
5. Time to valid data output
6. Maximum drive capability of data outputs

Footprint Comparison

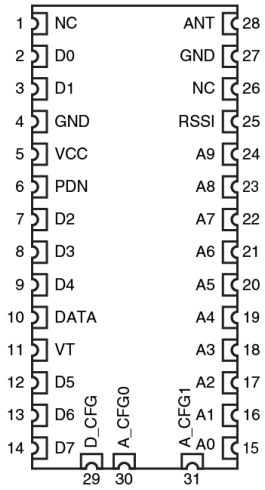

Figure 1a: RXM-***-KH3 Footprint

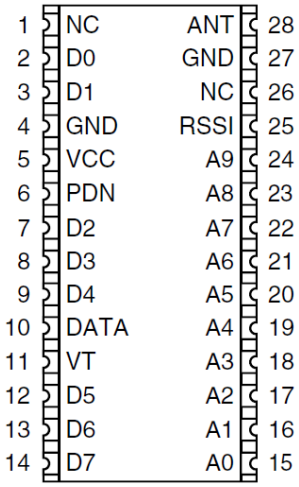

Figure 1b: RXD-***-KH2 Footprint

Part Number Comparison

PRODUCT GOING END OF LIFE	REPLACEMENT PRODUCT
RXD-315-KH2	RXM-315-KH3
RXD-418-KH2	RXM-418-KH3
RXD-433-KH2	RXM-433-KH3