200922853 WF200/WFM200S New Revision Parts and Datasheets Available

PRCN Issue Date: 9/22/2020 **Effective Date:** 12/28/2020

PCN Type: Product Revision

Description of Change

Silicon Labs is pleased to announce a new revision of WF200 and WFM200S parts and release of datasheet version 1.1 and 1.0, respectively.

SOFTWARE IMPACT DESCRIPTION:
The new revisions are supported by WF Firmware version 3.4.0 or later.

Datasheet updates as follows:

WF200 datasheet - Revision 1.1
• Updated Ordering Guide
• Updated Table 9.1 Top Marking for WF200 on page 32

WFM200S datasheet - Revision 1.0
• Updated Table 2.1 WFM200S Ordering Information (R indicates Full Reel) on page 5
• Updated Table 9.1 Top Marking Definition on page 31
• Updated Section 4.4 RF Transmitter General Characteristics and Section 4.4.1 RF Transmitter Characteristics
• Updated Section 8. Land Pattern
• Updated Table 4.1 Absolute Maximum Ratings on page 8
• Added Section 12.5 Japan and Section 12.6 South Korea - KC
• Added reference to AN1048 in 12. Certifications section

Note: After the effective date of the PRCN, Silicon Labs reserves the right not to accept orders for the old revision.

Reason for Change

Hardware update to address a vulnerability. Details are in covered in Security Advisory – A00000080.

Impact on Form, Fit, Function, Quality, Reliability

There is no impact on form, fit, quality or reliability.

Product Identification

Existing Part #	Replacement Part #	DropInCompInd.
WF200C	WF200D	Yes
WF200CR	WF200DR	Yes
WF200SC	WF200SD	Yes
WF200SCR	WF200SDR	Yes
WFM200S022XNA2	WFM200S022XNA3	Yes
WFM200S022XNA2R	WFM200S022XNA3R	Yes
WFM200S022XNN2	WFM200S022XNN3	Yes
WFM200S022XNN2R	WFM200S022XNN3R	Yes
WFM200SS22XNA2	WFM200SS22XNA3	Yes
WFM200SS22XNA2R	WFM200SS22XNA3R	Yes
WFM200SS22XNN2	WFM200SS22XNN3	Yes
WFM200SS22XNN2R	WFM200SS22XNN3R	Yes

Kit Identification

Kits impacted by the above product are listed below.
Orders for the following obsolete kits will no longer be accepted.

Existing Kit #	Replacement Kit #
NA	NA

Last Date of Unchanged Product: 12/28/2020

Qualification Samples

Available upon request.

Customer Response

Lack of acknowledgment of the PCN within 30 days constitutes acceptance of the change, Ref. JEDEC-J-STD-046.

To request further data or inquire about this notification, please contact your Silicon Labs sales representative. A list of Silicon Labs sales representatives is available at http://www.silabs.com.

Customers may approve early PCN acceptance by emailing approval, along with PCN # to PCNEarlyAcceptance@silabs.com

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Qualification Data

See appendices.

Part Rev D, TSMC Fabrication, SPIL Assembly							
Test Name	**Test Condition**	**Qualification**	**Lot ID or Start**	**Fail/Pass or End**	**Notes**	**Summary**	**Status**
Test Group A – Accelerated Environment Stress Tests							
HAST	JA110 130°C, 85%RH Vcc=3.6V, 96 hours	3 lots, N=>25	Q042814 Q042698 Q042697	0/27 0/27 0/27	1	3 lots 0/81	Pass
UHAST	JA110 130°C, 85%RH 96 hours	3 lots, N=>77	Q042813 Q042703 Q042702	0/27 0/27 0/27	1	3 lots 0/81	Pass
Temp Cycle	JA104 Cond C: -65°C to 150°C 500 cycles	3 lots, N=>25	Q042812 Q042699 Q042696	0/27 0/26 0/27	1 1 1	3 lots 0/80	Pass
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q042815 Q042701 Q042700	0/25 0/27 0/27	1 1 1	3 lots 0/79	Pass
Test Group B – Accelerated Lifetime Simulation Tests							
HTOL	JA108 T_J ≥ 125°C, Dynamic Vcc=3.6V, 1000 hours	3 lots, N=>77	Q042652 Q042651 Q043678	0/80 0/80 0/80		3 lots 0/240	Pass
LTOL	JA108 T_A = -10°C, Dynamic Vcc=3.6V, 1000 hours	1 lot, N=>32	Q042766	0/40		1 lots 0/40	Pass
ELFR	JA108 T_J ≥ 125°C, Dynamic Vcc=3.6V, 48 hours	3 lots, N=>500	Q042650 Q046534 Q043529 Q042649	0/520 0/80 0/520 0/522		4 lots 0/1642	Pass
Test Group E – Electrical Verification							
ESD-HBM	JS-001	1 lot, N=>3	Q042644			2.5 kV	Class 2
ESD-CDM	JS-002	1 lot, N=>3	Q046533			750 V	Class C2b
Latch Up	JESD78 ±200mA	1 lot, N=>3	Q042645 Q042646	25 °C 125 °C			Pass

Notes:
1. Parts are Pre-conditioned at MSL1/260°C

This report applies to the following part numbers:	
WF200D	WF200SD

Appendix 1. WF200 Qualification Report

Part Rev A3, TSMC Fabrication, ASEKR Assembly except as noted							
Test Name	**Test Condition**	**Qualification**	**Lot ID or Start**	**Fail/Pass or End**	**Notes**	**Summary**	**Status**
Test Group A – Accelerated Environment Stress Tests							
THB	JA101 85°C, 85%RH Vcc=3.6V, 1000 hours	3 lots, N=>25	Q044243 Q044255 Q044256	0/25 0/25 0/25	1 1 1	3 lots 0/75	Pass
Temp Cycle	JA104 Cond G: -40°C to 125°C 850 cycles	3 lots, N=>25	Q044242 Q044258 Q044257	0/25 0/25 0/25	1 1 1	3 lots 0/75	Pass
HTSL	JA103 150°C, 1000hr	3 lots, N=>25	Q044241 Q044260 Q044259	0/25 0/25 0/25	1 1 1	3 lots 0/75	Pass
Test Group B – Accelerated Lifetime Simulation Tests							
HTOL	JA108 T_J ≥ 125°C, Dynamic Vcc=3.6V, 1000 hours	3 lots, N=>77	Q042651 Q042652 Q043678	0/80 0/80 0/80		3 lots 0/240	Pass
LTOL	JA108 T_A = -10°C, Dynamic Vcc=3.6V, 1000 hours	1 lot, N=>32	Q042766	0/40		1 lots 0/40	Pass
ELFR	JA108 T_J ≥ 125°C, Dynamic Vcc=3.6V, 48 hours	3 lots, N=>500	Q042649 Q042650 Q043529	0/522 0/520 0/520		3 lots 0/1562	Pass
Test Group E – Electrical Verification							
ESD-HBM	JS-001	1 lot, N=>3	Q044603			2 kV	Class 2
ESD-CDM	JESD22-C101	1 lot, N=>3	Q046396			500 V	Class III
Latch Up	JESD78 ±100mA Overvoltage = 3.6V	1 lot, N=>3 1 lot, N=>3	Q044152 Q044153	25 °C 125 °C			Pass Pass

Notes:
1. Parts are Pre-conditioned at MSL3/260°C

This report applies to the following part numbers:
WFM200SS22XNA3/R
WFM200S022XNA3/R

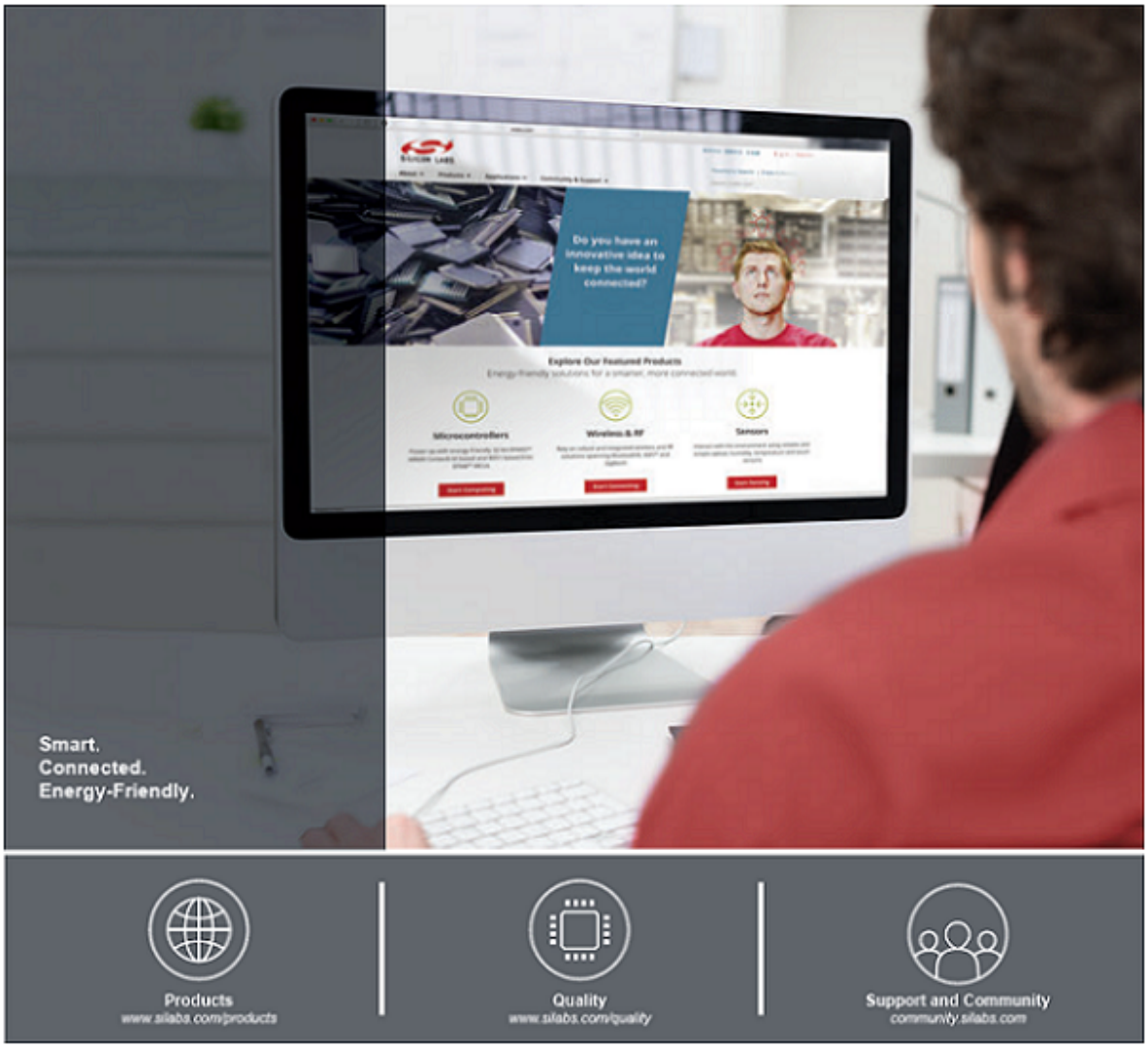
Appendix 2. WFM200 Antenna Qualification Report

Part Rev A3, TSMC Fabrication, ASEKR Assembly except as noted							
Test Name	**Test Condition**	**Qualification**	**Lot ID or Start**	**Fail/Pass or End**	**Notes**	**Summary**	**Status**
Test Group A – Accelerated Environment Stress Tests							
THB	JA101		Q044243	0/25	1		
	85°C, 85%RH	3 lots, N=>25	Q044255	0/25	1	3 lots	Pass
	Vcc=3.6V, 1000 hours		Q044256	0/25	1	0/75	
Temp Cycle	JA104		Q044242	0/25	1		
	Cond G: -40°C to 125°C	3 lots, N=>25	Q044258	0/25	1	3 lots	Pass
	850 cycles		Q044244	0/25	1	0/75	
HTSL	JA103		Q044241	0/25	1		
	150°C, 1000hr	3 lots, N=>25	Q044260	0/25	1	3 lots	Pass
			Q044259	0/25	1	0/75	
Test Group B – Accelerated Lifetime Simulation Tests							
HTOL	JA108		Q042651	0/80			
	$T_J \geq 125°C$, Dynamic	3 lots, N=>77	Q042652	0/80		3 lots	Pass
	Vcc=3.6V, 1000 hours		Q043678	0/80		0/240	
LTOL	JA108						
	T_A = -10°C, Dynamic	1 lot, N=>32	Q042766	0/40		1 lots	Pass
	Vcc=3.6V, 1000 hours					0/40	
ELFR	JA108		Q042649	0/522			
	$T_J \geq 125°C$, Dynamic	3 lots, N=>500	Q042650	0/520		3 lots	Pass
	Vcc=3.6V, 48 hours		Q043529	0/520		0/1562	
Test Group E – Electrical Verification							
ESD-HBM	JS-001	1 lot, N=>3	Q044603			2 kV	Class 2
ESD-CDM	JESD22-C101	1 lot, N=>3	Q046396			500 V	Class III
Latch Up	JESD78	1 lot, N=>3	Q044152	25 °C			Pass
	±100mA	1 lot, N=>3	Q044153	125 °C			Pass
	Overvoltage = 3.6V						

Notes:
1. Parts are Pre-conditioned at MSL3/260°C

This report applies to the following part numbers:
WFM200SS22XNN3/R
WFM200S022XNN3/R

Appendix 3. WFM200 Non-Antenna Qualification Report



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