PRODUCT / PROCESS CHANGE NOTIFICATION

1. PCN basic data

1.1 Company	STMicroelectronics International N.V
1.2 PCN No.	AMS/21/12593
1.3 Title of PCN	Reflow profile recommendation for selected BlueNRG modules
1.4 Product Category	See product list
1.5 Issue date	2021-03-09

2. PCN Team

2.1 Contact supplier	
2.1.1 Name	ROBERTSON HEATHER
2.1.2 Phone	+1 8475853058
2.1.3 Email	heather.robertson@st.com
2.2 Change responsibility	
2.2.1 Product Manager	Marco VENERI
2.1.2 Marketing Manager	Marco VENERI
2.1.3 Quality Manager	Jean-Marc BUGNARD

3. Change

3.1 Category	3.2 Type of change	3.3 Manufacturing Location
General Product & Design	Modification of datasheet : Errata/error fix	Back end plant : ASE Korea

4. Description of change

	Old	New
4.1 Description	Peak temperature (Tp) = 245 (-0) °C Time within 5°C of peak temperature (Tp-5°C) = min 30 s	Peak temperature (Tp) = 240 + 0 °C Time within 5°C of peak temperature (Tp-5°C) = 10-20 sec
4.2 Anticipated Impact on form,fit, function, quality, reliability or processability?	No impact	

5. Reason / motivation for change

5.1 Motivation	To avoid any prohibited liquidus state of module solder joints during customer reflow.
5.2 Customer Benefit	QUALITY IMPROVEMENT

6. Marking of parts / traceability of change

6.1 Description	N/A

7. Timing / schedule

7.1 Date of qualification results	2021-02-01
7.2 Intended start of delivery	2021-05-15
7.3 Qualification sample available?	Upon Request

8. Qualification / Validation

8.1 Description	12593 BLUENRG-Modules_Reflow_Profile_Change.pdf		
8.2 Qualification report and qualification results	Available (see attachment)	**Issue Date**	2021-03-09

9. Attachments (additional documentations)

12593 Public product.pdf
12593 BLUENRG-Modules_Reflow_Profile_Change.pdf

10. Affected parts		
10. 1 Current		10.2 New (if applicable)
10.1.1 Customer Part No	10.1.2 Supplier Part No	10.1.2 Supplier Part No
	BLUENRG-M0A	
	BLUENRG-M2SP	

IMPORTANT NOTICE – PLEASE READ CAREFULLY

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

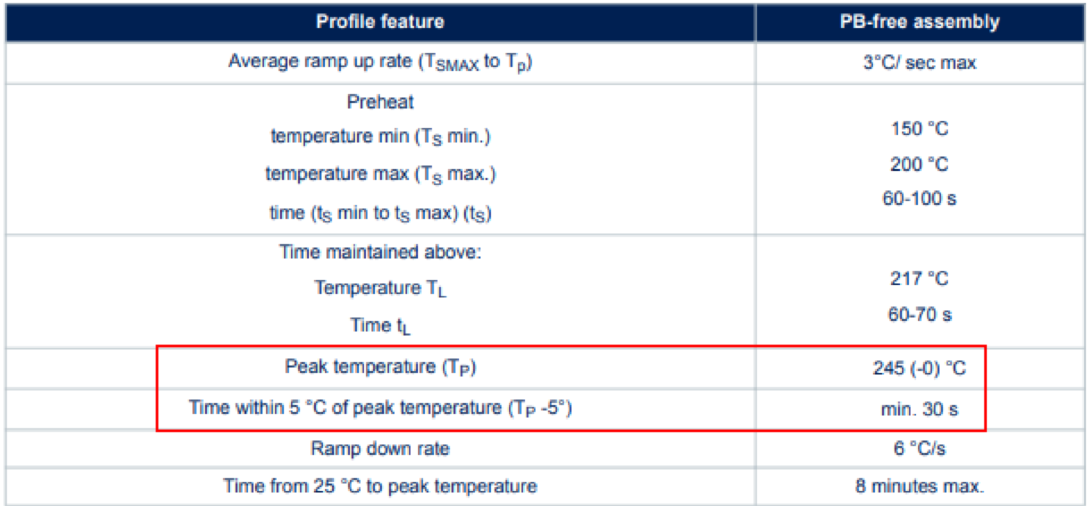
Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved

BLUENRG-M0A
BLUENRG-M2SP

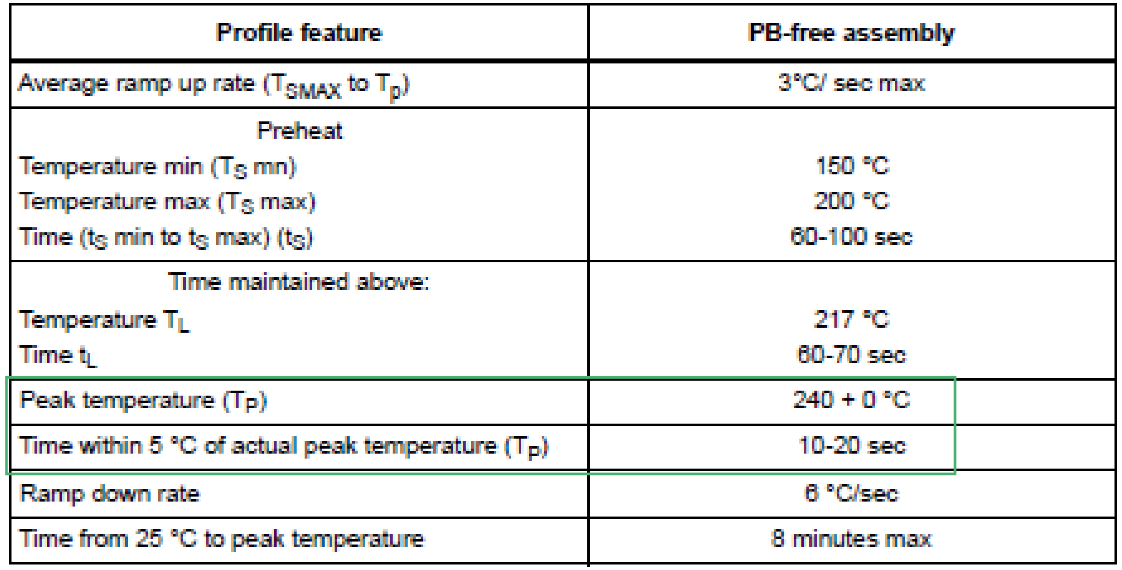
Reflow profile recommendations changes within datasheets

Reflow profile recommendations changes within datasheet



Profile feature	PB-free assembly
Average ramp up rate (T_{SMAX} to T_p)	3°C/ sec max
Preheat temperature min (T_S min.) temperature max (T_S max.) time (t_S min to t_S max) (t_S)	150 °C 200 °C 60-100 s
Time maintained above: Temperature T_L Time t_L	217 °C 60-70 s
Peak temperature (T_P)	245 (-0) °C
Time within 5 °C of peak temperature (T_P -5°)	min. 30 s
Ramp down rate	6 °C/s
Time from 25 °C to peak temperature	8 minutes max.

Peak temperature (Tp) and Time within 5°C of peak temperature (Tp-5°C) need to be changed.



Profile feature	PB-free assembly
Average ramp up rate (T_{SMAX} to T_p)	3°C/ sec max
Preheat Temperature min (T_S mn) Temperature max (T_S max) Time (t_S min to t_S max) (t_S)	150 °C 200 °C 60-100 sec
Time maintained above: Temperature T_L Time t_L	217 °C 60-70 sec
Peak temperature (T_P)	240 + 0 °C
Time within 5 °C of actual peak temperature (T_p)	10-20 sec
Ramp down rate	6 °C/sec
Time from 25 °C to peak temperature	8 minutes max

Peak temperature (Tp) and Time within 5°C of peak temperature (Tp-5°C) have been changed to avoid any prohibited liquidus state of module solder joints.

Thank you

life.augmented

Public Products List

Publict Products are off the shelf products. They are not dedicated to specific customers, they are available through ST Sales team, or Distributors, and visible on ST.com

PCN Title : Reflow profile recommendation for selected BlueNRG modules
PCN Reference : AMS/21/12593

Subject : Public Products List

Dear Customer,

Please find below the Standard Public Products List impacted by the change.

BLUENRG-M0A	**BLUENRG-M2SP**	

IMPORTANT NOTICE – PLEASE READ CAREFULLY

Subject to any contractual arrangement in force with you or to any industry standard implemented by us, STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2018 STMicroelectronics – All rights reserved