



# PRODUCT INFORMATION LETTER

---

PIL IPD/13/7729  
Dated 18 Mar 2013

---

**New Lock Reel in Carsem SuZhou**

Sales Type/product family label	see attached list
Type of change	Packing
Reason for change	To improve quality and service to ST Customers
Description	To qualify FangSheng (China) lock reel material as alternate carrier tape for QFN Packages assembled by Carsem SuZhou (China) subcontractor. To respond the ever increasing customer's demand for the products housed in the QFN Packages, ST is glad to announce the expansion of capacity by using this alternative lock reel manufactured by FangSheng (China) for our Carsem SuZhou (China) subcontractor.
Forecasted date of implementation	08-Apr-2013
Forecasted date of samples for customer	11-Mar-2013
Forecasted date for <b>STMicroelectronics</b> change Qualification Plan results availability	11-Mar-2013
Involved ST facilities	Carsem SuZhou

## DOCUMENT APPROVAL

Name	Function
Giuffrida, Antonino	Marketing Manager
Martelli, Nunzio	Product Manager
Vitali, Gian Luigi	Q.A. Manager

## WHAT:

To qualify FangSheng (China) lock reel material as alternate carrier tape for QFN Packages assembled by Carsem SuZhou (China) subcontractor.

To respond the ever increasing customer's demand for the products housed in the QFN Packages, ST is glad to announce the expansion of capacity by using this alternative lock reel manufactured by FangSheng (China) for our Carsem SuZhou (China) subcontractor.

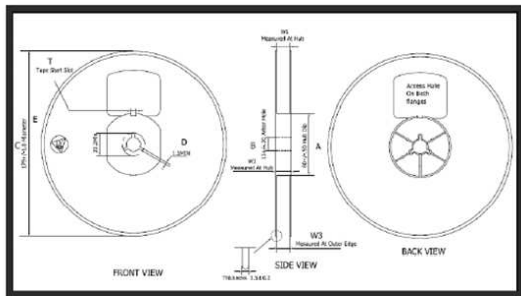
For the complete list of the part numbers affected by the change, please refer to the attached Products list.

## WHY:

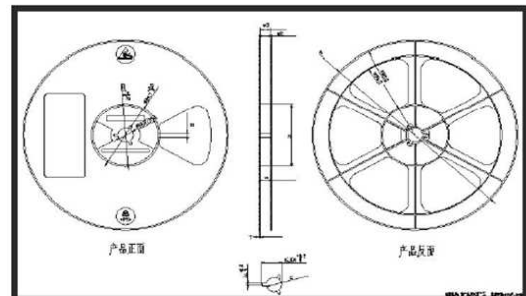
To improve quality and service to ST Customers

## HOW:

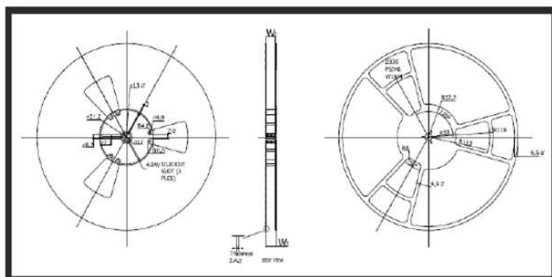
Our Carsem SuZhou (China) subcontractor, will be expanding capacity according the ST quality and reliability standard by introducing the FangSheng (China) lock reel material as here below depicted .



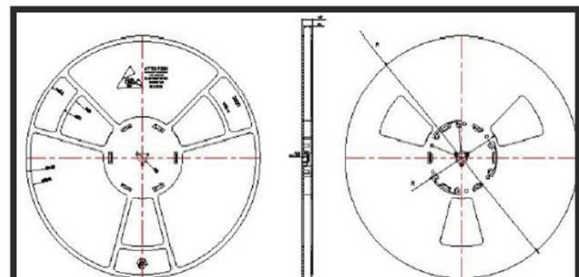
Currently "In Use" HWAYEON 7" lock reel drawing



New Alternative Fang Sheng 7" lock reel drawing



Currently "In Use" HWAYEON 13" lock reel drawing



New Alternative Fang Sheng 13" lock reel drawing

Existing & new supplier FANGSHENG lock reel measure data compare																
Supplier	7 Inch 8mm lockreel				13"-12mm lockreel				13"- 16mm lockreel				13"- 24mm lockreel			
	HWAYEON		FANGSHGN		HWAYEON		FANGSHGN		HWAYEON		FANGSHGN		HWAYEON		FANGSHGN	
Internal width	8.4+/-1	8.29	8.4+/-1	8.42	12.4+/-1	12.94	12.4+/-1	13.01	16.4+/-1	17.22	16.4+/-1	16.98	24.4+/-1	25.27	24.4+/-1	24.70
Thickness	1.5+/-0.4	1.53	1.5+/-0.4	1.55	2.1+/-0.5	2.24	2.1+/-0.5	2.29	2.1+/-0.5	2.39	2.1+/-0.5	2.34	2.1+/-0.5	2.11	2.1+/-0.5	2.24
HUB DIA(N)	60+/-1	60.27	60+/-1	59.54	100+/-2	99.89	100+/-2	99.53	100+/-2	100.84	100+/-2	99.61	100+/-2	99.88	100+/-2	99.68
Center hole	13.1+/-0.2	13.12	13.1+/-0.2	13.16	13.1+/-0.2	13.08	13.1+/-0.2	13.11	13.1+/-0.2	13.15	13.1+/-0.2	13.19	13.1+/-0.2	12.98	13.1+/-0.2	13.20
Overall thickness	11.2+/-1	11.62	11.6+/-1	11.61	16.6+/-1	17.66	16.6+/-1	17.54	20.6+/-1	21.12	20.6+/-1	21.43	23.6+/-1	24.53	23.6+/-1	24.35
Length	179+/-2	178.18	180+/-2	178.97	330+/-2	329.14	330+/-2	329.96	330+/-2	329.45	330+/-2	329.13	330+/-2	329.03	330+/-2	329.00

The changed here reported will not affect the electrical, dimensional and thermal parameters keeping unchanged all information reported on the relevant product's datasheets.  
There are as well no modifications in the packing modes nor in the standard delivery quantities either it may affect ST's Customers assembly methods.

#### WHEN:

Production start and first shipments will occur starting week 15-13.

### Marking and traceability:

Unless otherwise stated by customer specific requirement, the traceability of the parts assembled with the new material set will be ensured by the Q.A. number.

Lack of acknowledgement of the PCN within 30 days will constitute acceptance of the change.  
After acknowledgement, lack of additional response within the 90 day period will constitute acceptance of the change (Jedec Standard No. 46-C).  
In any case, first shipments may start earlier with customer's written agreement.

**Please Read Carefully:**

Information in this document is provided solely in connection with ST products. STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, modifications or improvements, to this document, and the products and services described herein at any time, without notice.

All ST products are sold pursuant to ST's terms and conditions of sale.

Purchasers are solely responsible for the choice, selection and use of the ST products and services described herein, and ST assumes no liability whatsoever relating to the choice, selection or use of the ST products and services described herein.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted under this document. If any part of this document refers to any third party products or services it shall not be deemed a license grant by ST for the use of such third party products or services, or any intellectual property contained therein or considered as a warranty covering the use in any manner whatsoever of such third party products or services or any intellectual property contained therein.

**UNLESS OTHERWISE SET FORTH IN ST'S TERMS AND CONDITIONS OF SALE ST DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY WITH RESPECT TO THE USE AND/OR SALE OF ST PRODUCTS INCLUDING WITHOUT LIMITATION IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE ( AND THEIR EQUIVALENTS UNDER THE LAWS OF ANY JURISDICTION ), OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.**

**UNLESS EXPRESSLY APPROVED IN WRITING BY TWO AUTHORIZED ST REPRESENTATIVES, ST PRODUCTS ARE NOT RECOMMENDED, AUTHORIZED OR WARRANTED FOR USE IN MILITARY, AIR CRAFT, SPACE, LIFE SAVING, OR LIFE SUSTAINING APPLICATIONS, NOR IN PRODUCTS OR SYSTEMS WHERE FAILURE OR MALFUNCTION MAY RESULT IN PERSONAL INJURY, DEATH, OR SEVERE PROPERTY OR ENVIRONMENTAL DAMAGE. ST PRODUCTS WHICH ARE NOT SPECIFIED AS "AUTOMOTIVE GRADE" MAY ONLY BE USED IN AUTOMOTIVE APPLICATIONS AT USER'S OWN RISK.**

Resale of ST products with provisions different from the statements and/or technical features set forth in this document shall immediately void any warranty granted by ST for the ST product or service described herein and shall not create or extend in any manner whatsoever, any liability of ST.

ST and the ST logo are trademarks or registered trademarks of ST in various countries.

Information in this document supersedes and replaces all information previously supplied.

The ST logo is a registered trademark of STMicroelectronics. All other names are the property of their respective owners

© 2013 STMicroelectronics - All rights reserved.

STMicroelectronics group of companies

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -  
Malaysia - Malta - Morocco - Philippines - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

[www.st.com](http://www.st.com)

