


## Product Change Notification (PCN)

PCN no.: <b>PCN-086 rev.1.0</b>		Date: <b>2013-08-16</b>
Device affected:		Device version / Build Code:
nRF24E2G-R7		<b>B</b>
nRF24E1G-R7		<b>B</b>
nRF51422-QFAA-R7		<b>C0</b>
nRF51822-QFAA-R7		<b>C0</b>
nRF51822-QFAB-R7		<b>A0</b>
nRF24LE1-F16Q48-R7		<b>C</b>
nRF24LE1-O17Q48-R7		<b>D / O</b>
Data sheet references: <b>NA</b>	Agreement reference: <b>NA</b>	Customers reference: <b>NA</b>

<b>Description of change:</b>	
Migration of 7in Reel used for these devices manufactured at Amkor Technologies Philippines from Philko to Peak as Reel provider.	
<b>Impact:</b> Does the change affect <u>product</u> :	
1. Form	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – describe: Color and outer diameter, see below
2. Fit	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – describe:
3. Function	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – describe:
4. Quality or Reliability	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes – describe:
Classification of change	<input checked="" type="checkbox"/> Minor <input type="checkbox"/> Major
<b>Reason for change:</b>	
Tool end-of-life at existing reel provider.	
<b>Consequences of change:</b>	
None negative.	
<b>Verification:</b>	
Old and new materials comply with industry standards and PASSED Amkor's acceptance procedure.	
<b>Marking/Shipping labels:</b>	
No changes in marking or shipping labels.	
<b>Change active from (date):</b>	<b>Change active from (lot no/date code):</b>
November 2013	1345
<b>Last time order (date):</b> (optional)	<b>Final shipment date:</b> (optional)
NA	NA
<b>Attachments:</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes – describe: Material Properties Data Sheet of New Reel (Peak)
 <small>MPDS of Plastic Reel rev.0.pdf</small>	
<b>Technical contact at Nordic Semiconductor:</b>	<b>Commercial contact at Nordic Semiconductor:</b>
Contact: Maria Cristina Sario Title: Project Manager e-mail: <a href="mailto:maria.cristina.sario@nordicsemi.no">maria.cristina.sario@nordicsemi.no</a>	Contact: Thomas Embla Bonnerud Title: Product Manager e-mail: <a href="mailto:thomas.embla.bonnerud@nordicsemi.no">thomas.embla.bonnerud@nordicsemi.no</a>

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**Authorization for Nordic Semiconductor**

Product Manager

Date: 2013-08-16

Sign:



Quality Director

Date: 2013-08-16

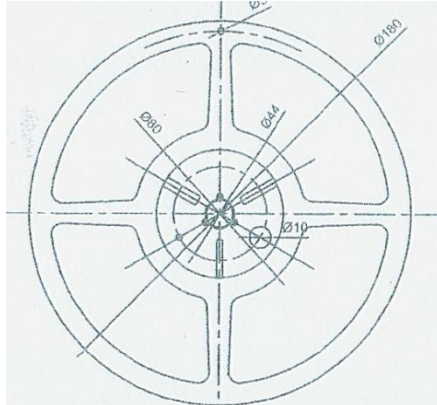
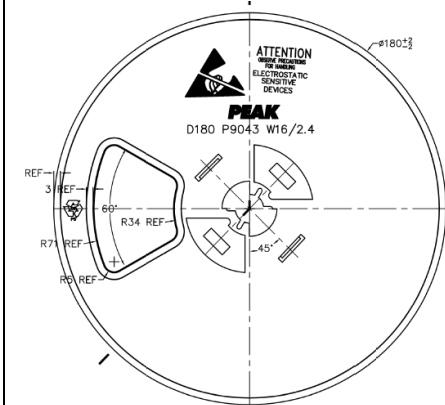
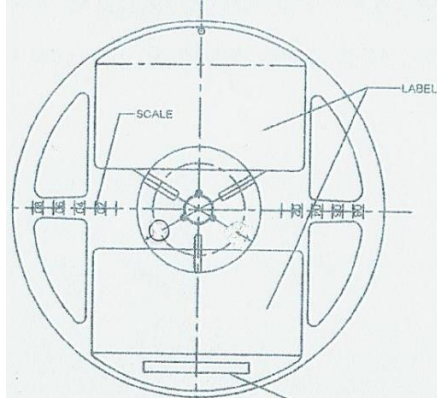
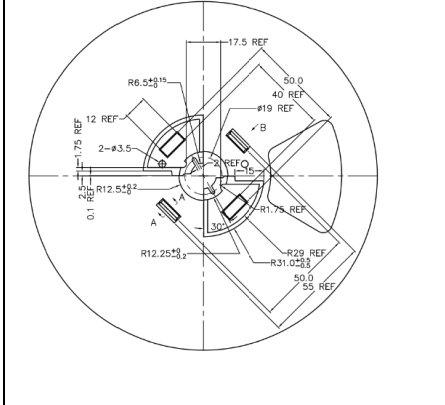

Sign:



*Please note that all last time buy orders are non-cancellable and non-returnable.*

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## Appendix: Change details

	EXISTING	NEW
<b>SUPPLIER</b>	PHILKO	PEAK
<b>REEL TYPE</b>	LITE REEL	LOCK REEL
<b>COLOR</b>	WHITE	BLACK
<b>DIMENSIONS</b>	178 mm -1.0/+2.0 (60mm hub)	180mm +/- 2.0 (60mm hub)
<b>MATERIAL</b>	POLYSTYRENE	POLYSTYRENE
<b>LEFT SIDE VIEW</b>		
<b>RIGHT SIDE VIEW</b>		
<b>ACTUAL PHOTO</b>		

# Material Properties Data Sheet

## PS Reel



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Date Revised : Dec. 13, 2012

Revision No.: 0

**Product Name : PS REEL**

PS stands for Polystyrene

**Manufacturer : PEAK Plastic & Metal Products(Int'l) Ltd.**

188 Industrial Estate, Henggang Town, Longgang District

Shenzhen, PRC

General Information: 86-755-6129-5976

Properties	Test Method	S.I. Unit		English Unit	
		Unit	Value	Unit	Value
<b>General</b>					
Melt Flow Rate(200°C/5kg)	ASTM D1238	g/10 min	4.5	g/10 min	4.5
Specific Gravity	ASTM D792	-	1.04	-	1.04
Linear Thermal Expansion(10 <sup>-5</sup> )		cm/cm/°C	7.6	in/in/°F	4.2
Mold Shrinkage	ASTM D955	cm/cm	0.004-0.007	in/in	0.004-0.007
<b>Mechanical</b>					
Yield Tensile Strength	ASTM D638	MPa	28	psi	4,000
Ultimate Tensile Strength	ASTM D638	MPa	28	psi	4,000
Ultimate Elongation	ASTM D638	%	50	%	50
Flexural Strength	ASTM D790	MPa	50	psi	7,300
Flexural Modulus	ASTM D790	MPa	2,007	psi	291,000
Notched Izod @ 23°C	ASTM D256	J/m	128	ft-lb/in	2.4
<b>Thermal</b>					
Vicat Softening Point	ASTM D1525	°C	105	°F	221
Deflection Temperature Under Load @ 1.82 MPa, unannealed	ASTM D648	°C	75	°F	167
Deflection Temperature Under Load @ 1.82 MPa, annealed	ASTM D648	°C	99	°F	210
<b>Electrical</b>					
Surface Resistivity	ASTM D257	Ω/sq	1X10 <sup>5</sup> ~ 1X10 <sup>11</sup>	Ω/sq	1X10 <sup>5</sup> ~ 1X10 <sup>11</sup>

**Flammability**

UL94 Flame Class, 1.57mm  
thickness

UL94

Rating

HB

Rating

HB

**Shelf life**

2 years after manufacturing date under recommended storage conditions

\* All test performed under laboratory condition.

\* This data are intended as a general guide only.