

# SOT604-1

plastic thermal enhanced ball grid array package; 504 balls;  
body 35 x 35 x 0.9 mm; heatsink

8 February 2016

Package information

## 1. Package summary

<b>Terminal position code</b>	B (bottom)
<b>Package type descriptive code</b>	HBGA504
<b>Package type industry code</b>	HBGA504
<b>Package style descriptive code</b>	HBGA (thermal enhanced ball grid array)
<b>Package style suffix code</b>	NA (not applicable)
<b>Package body material type</b>	P (plastic)
<b>IEC package outline code</b>	144E
<b>JEDEC package outline code</b>	MS-034
<b>Mounting method type</b>	S (surface mount)
<b>Issue date</b>	17-3-2003

Table 1. Package summary

Symbol	Parameter	Min	Typ	Nom	Max	Unit
D	package length	34.8	-	35	35.2	mm
E	package width	34.8	-	35	35.2	mm
A	seated height	[tbd]	-	1.65	1.65	mm
A <sub>2</sub>	package height	0.8	-	0.9	1	mm
n <sub>2</sub>	actual quantity of termination	-	-	504	-	

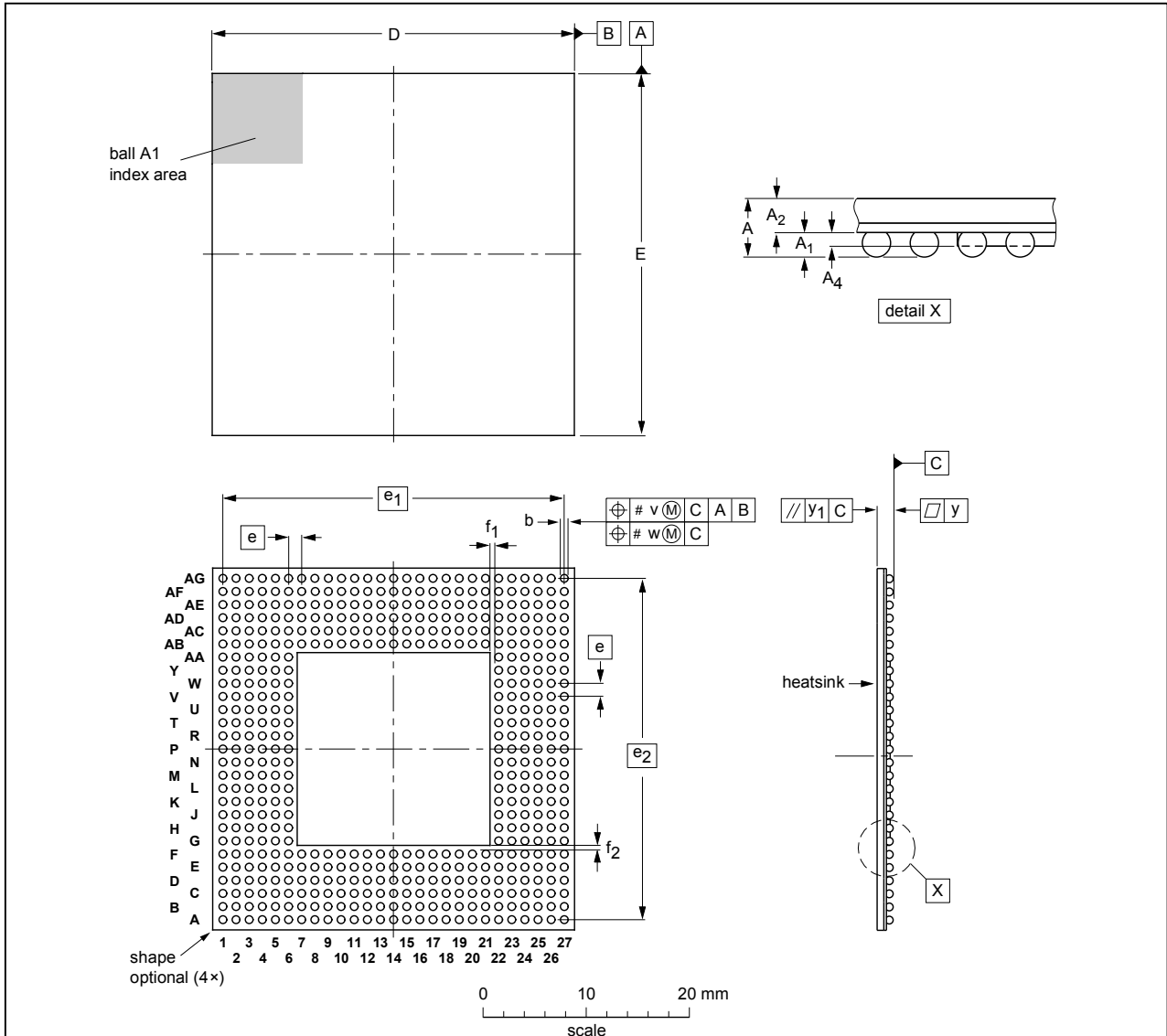


plastic thermal enhanced ball grid array package;  
504 balls; body 35 x 35 x 0.9 mm; heatsink

## 2. Package outline

HLBGA504: plastic thermal enhanced low profile ball grid array package; 504 balls;  
body 35 x 35 x 0.9 mm; heatsink

SOT604-1



DIMENSIONS (mm are the original dimensions)

UNIT	A max.	A1	A2	A4 max.	b	D	E	e	e1	e2	v	w	y	y1	f1 min.	f2 min.
mm	1.65	0.7 0.6	1.0 0.8	0.42	0.85 0.65	35.2 34.8	35.2 34.8	1.27	33.02	33.02	0.3	0.1	0.15	0.15	0.5	0.5

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	JEITA			
SOT604-1	144E	MO-192	---			03-03-17 10-08-10

Fig. 1. Package outline HLBGA504 (SOT604-1)

plastic thermal enhanced ball grid array package;  
504 balls; body 35 x 35 x 0.9 mm; heatsink

### 3. Soldering

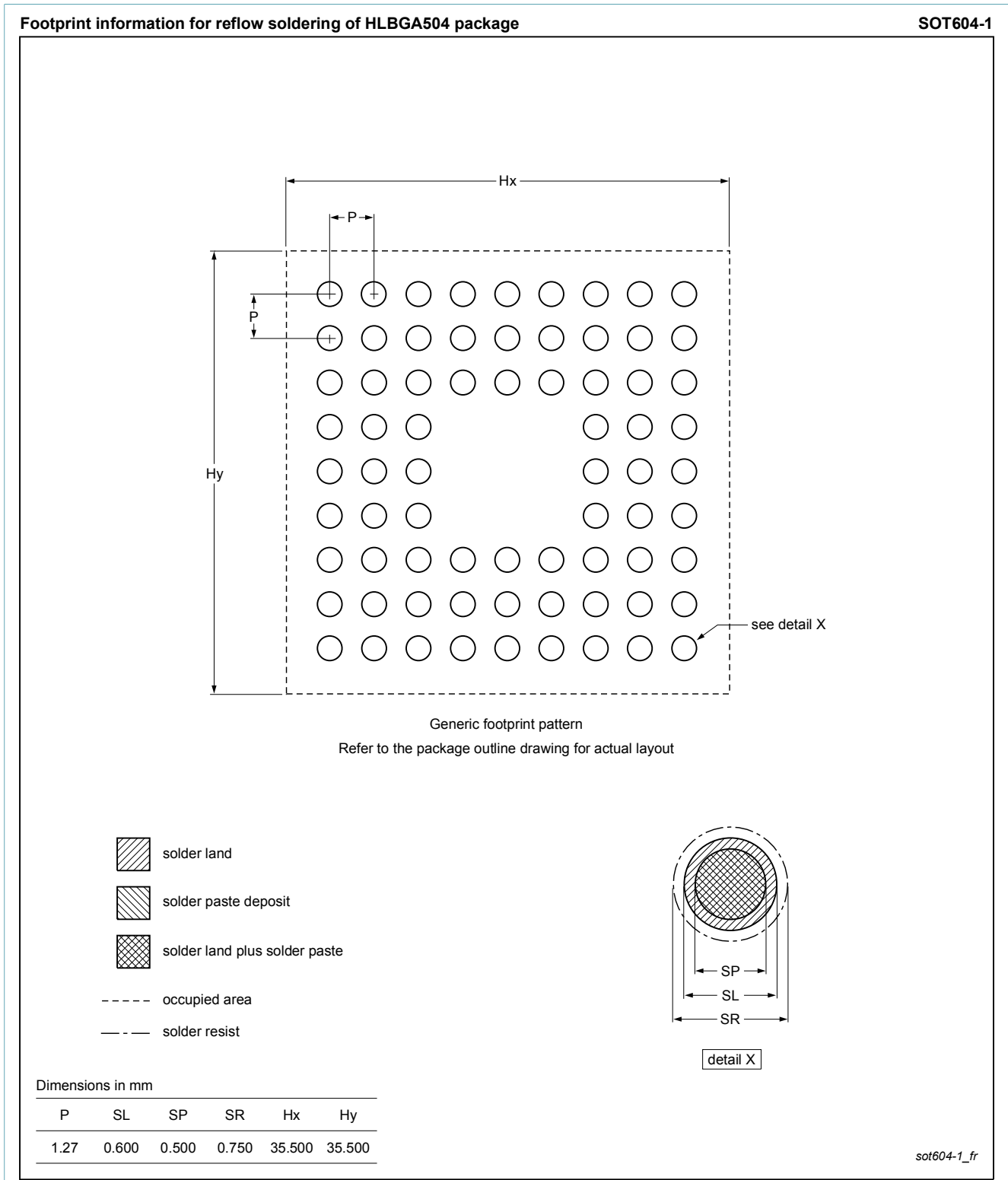


Fig. 2. Reflow soldering footprint for HBLGA504 (SOT604-1)

plastic thermal enhanced ball grid array package;  
504 balls; body 35 x 35 x 0.9 mm; heatsink

## 4. Legal information

### Disclaimers

**Limited warranty and liability** — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors.

In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory.

Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the *Terms and conditions of commercial sale* of NXP Semiconductors.

**Right to make changes** — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

plastic thermal enhanced ball grid array package;  
504 balls; body 35 x 35 x 0.9 mm; heatsink

## 5. Contents

---

1. Package summary.....	1
2. Package outline.....	2
3. Soldering.....	3
4. Legal information.....	4

---

© NXP Semiconductors N.V. 2016. All rights reserved

For more information, please visit: <http://www.nxp.com>

For sales office addresses, please send an email to: [salesaddresses@nxp.com](mailto:salesaddresses@nxp.com)

Date of release: 8 February 2016

---