

# SOT2110-1

LFBGA231, low profile fine pitch ball grid array package, 231 terminals, 0.65 mm pitch, 12 mm x 12 mm x 1.2 mm body

31 March 2020

Package information

## 1 Package summary

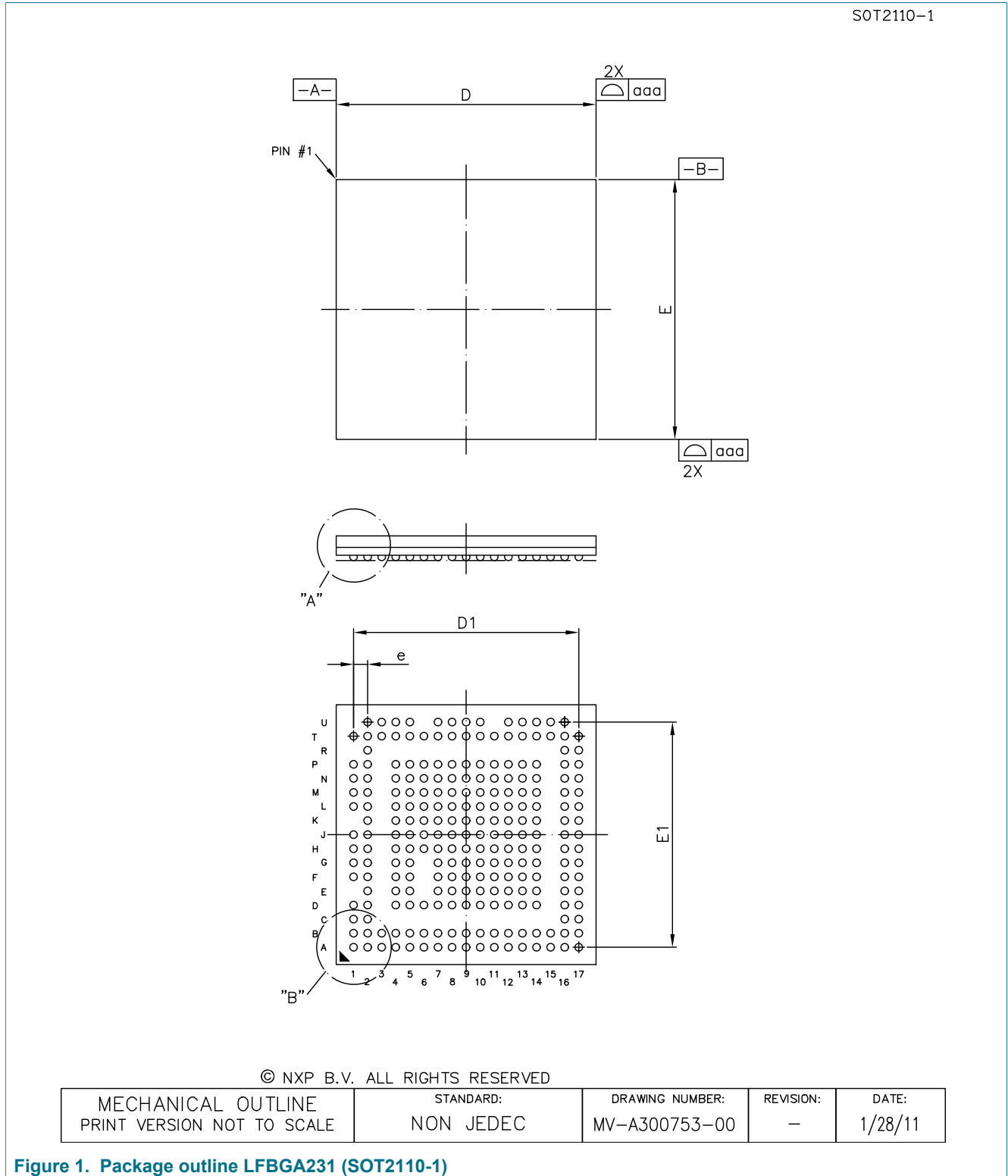
<b>Terminal position code</b>	B (bottom)
<b>Package type descriptive code</b>	LFBGA231
<b>Package style descriptive code</b>	LFBGA (low profile fine-pitch ball grid array)
<b>Package body material type</b>	P (plastic)
<b>Mounting method type</b>	S (surface mount)
<b>Issue date</b>	28-01-2011
<b>Manufacturer package code</b>	MV-A300753-00A

Table 1. Package summary

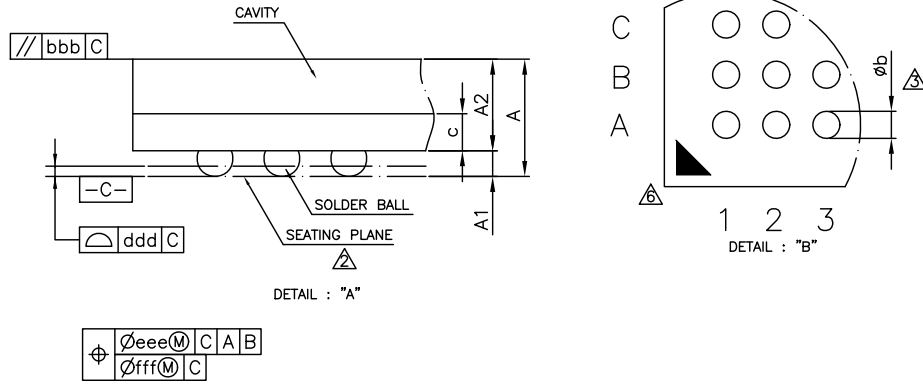
Parameter	Min	Nom	Max	Unit
package length	11.9	12	12.1	mm
package width	11.9	12	12.1	mm
package height	1.1	1.2	1.3	mm
nominal pitch	-	0.65	-	mm
actual quantity of termination	-	231	-	



2 Package outline



SOT2110-1



Symbol	Dimension in mm			Dimension in inch		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.10	1.20	1.30	0.043	0.047	0.051
A1	0.20	0.25	0.30	0.008	0.010	0.012
A2	0.84	0.89	0.94	0.033	0.035	0.037
c	0.32	0.36	0.40	0.013	0.014	0.016
D	11.90	12.00	12.10	0.469	0.472	0.476
E	11.90	12.00	12.10	0.469	0.472	0.476
D1	---	10.40	---	---	0.409	---
E1	---	10.40	---	---	0.409	---
e	---	0.65	---	---	0.026	---
b	0.30	0.35	0.40	0.012	0.014	0.016
aaa	0.15			0.006		
bbb	0.10			0.004		
ddd	0.10			0.004		
eee	0.15			0.006		
fff	0.08			0.003		
MD/ME	17/17			17/17		

- NOTE :
1. CONTROLLING DIMENSION : MILLIMETER.
  2. PRIMARY DATUM C AND SEATING PLANE ARE DEFINED BY THE SPHERICAL CROWNS OF THE SOLDER BALLS.
  3. DIMENSION b IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
  4. THERE SHALL BE A MINIMUM CLEARANCE OF 0.25mm BETWEEN THE EDGE OF THE SOLDER BALL AND THE BODY EDGE.
  5. SPECIAL CHARACTERISTICS C CLASS: bbb, ddd
  6. THE PATTERN OF PIN 1 FIDUCIAL IS FOR REFERENCE ONLY.

© NXP B.V. ALL RIGHTS RESERVED

MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON JEDEC	DRAWING NUMBER: MV-A300753-00	REVISION: -	DATE: 1/28/11
--	------------------------	----------------------------------	----------------	------------------

Figure 2. Package outline detail LFBGA231 (SOT2110-1)

### 3 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.

Contents

---

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