



# SOT1990-1

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body

6 September 2018

Package information

## 1 Package summary

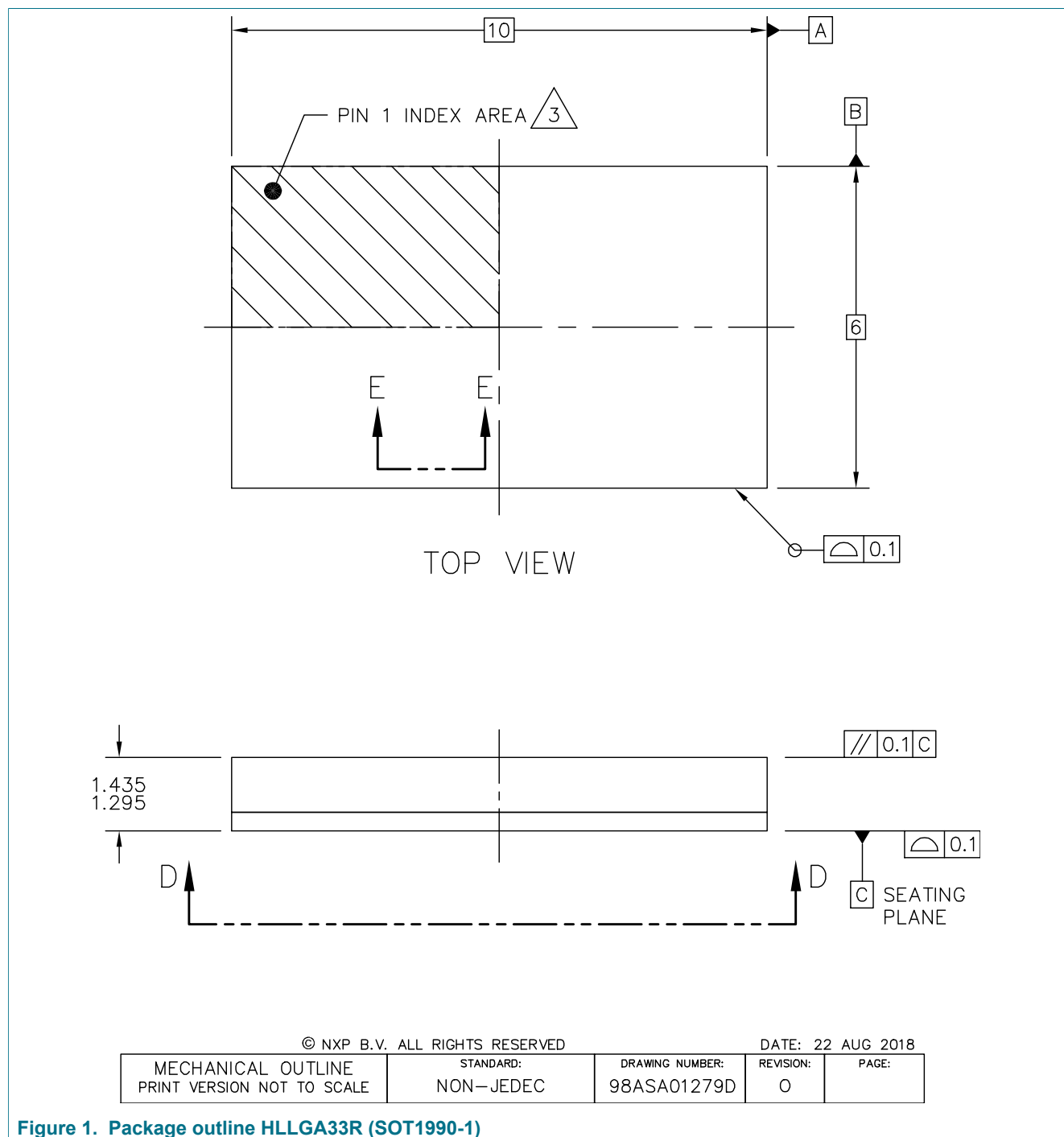
Terminal position code	B (bottom)
Package type descriptive code	HLLAG33R
Package style descriptive code	HLLGA (thermal enhanced low profile land grid array)
Mounting method type	S (surface mount)
Issue date	22-08-2018
Manufacturer package code	98ASA01279D

Table 1. Package summary

Parameter	Min	Nom	Max	Unit
package length	-	10	-	mm
package width	-	6	-	mm
seated height	-	1.365	-	mm
nominal pitch	-	0.8	-	mm
actual quantity of termination	-	33	-	

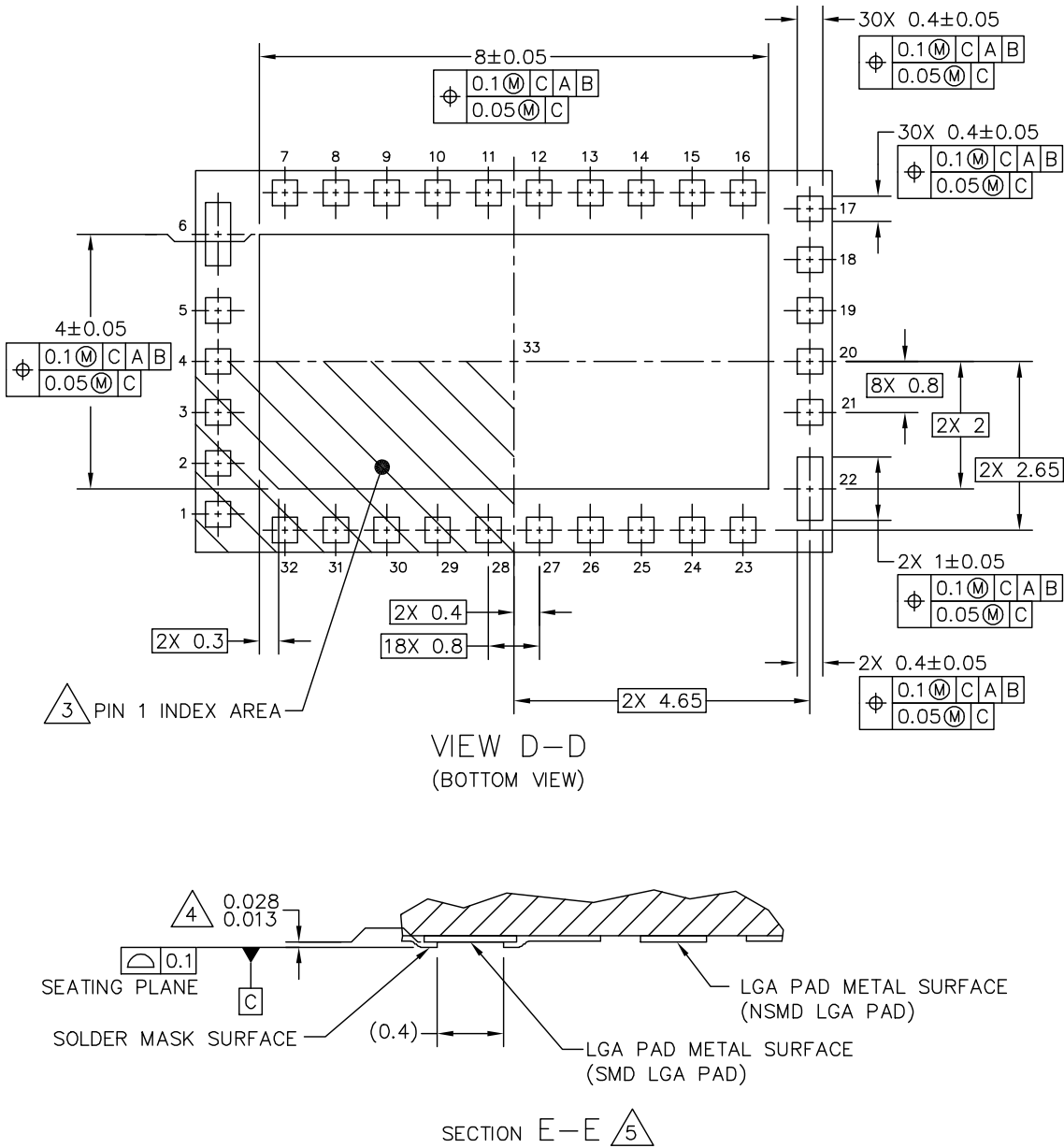


## 2 Package outline



**Figure 1. Package outline HLLGA33R (SOT1990-1)**

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body

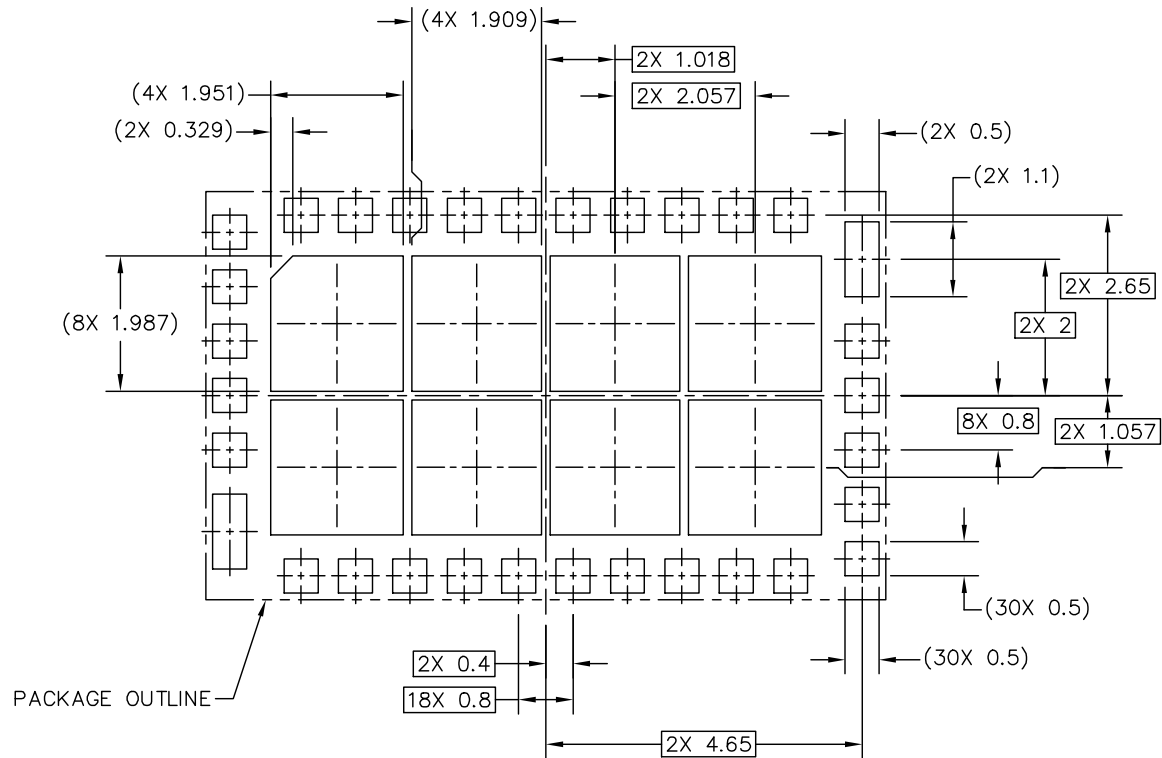


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MECHANICAL OUTLINE PRINT VERSION NOT TO SCALE	STANDARD: NON-JEDEC	DRAWING NUMBER: 98ASA01279D	REVISION: O	PAGE:

Figure 2. Package outline detail HLLGA33R (SOT1990-1)

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body

3 Soldering



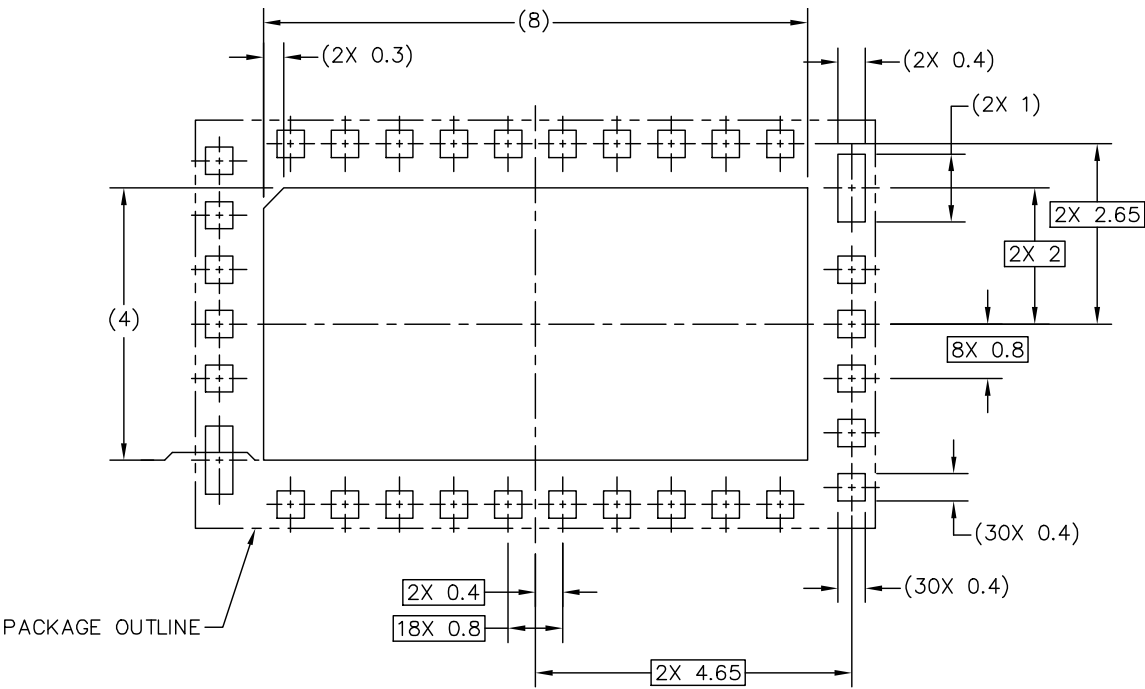
PCB DESIGN GUIDELINES – SOLDER MASK OPENING PATTERN

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Figure 3. Reflow soldering footprint part1 for HLLGA33R (SOT1990-1)

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body



PCB DESIGN GUIDELINES – I/O PADS AND SOLDERABLE AREAS

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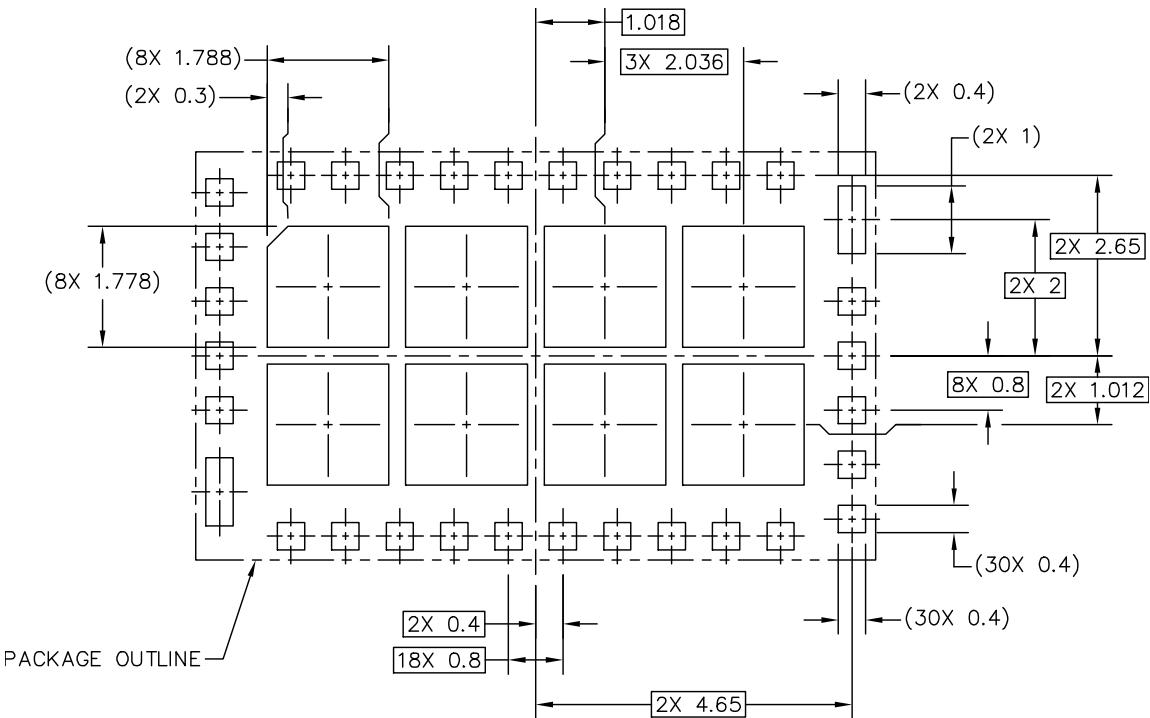
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Figure 4. Reflow soldering footprint part2 for HLLGA33R (SOT1990-1)

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body



RECOMMENDED STENCIL THICKNESS 0.125

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

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Figure 5. Reflow soldering footprint part3 for HLLGA33R (SOT1990-1)

HLLGA33R, thermal enhanced low profile land grid array, 33 terminals, 0.8 mm pitch, 10 mm x 6 mm x 1.365 mm body

NOTES:

- 1. ALL DIMENSIONS IN MILLIMETERS.
- 2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M–1994.
- 3. PIN 1 FEATURE SHAPE, SIZE AND LOCATION MAY VARY.
- 4. DIMENSION APPLIES TO ALL LEADS AND FLAG.
- 5. THE BOTTOM VIEW SHOWS THE SOLDERABLE AREA OF THE PADS. THE CENTER PAD (PIN 33) IS SOLDER MASK DEFINED. SOME PERIPHERAL PADS ARE SOLDER MASK DEFINED (SMD) AND OTHERS ARE NON–SOLDERMASK DEFINED (NSMD).

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Figure 6. Package outline note HLLGA33R (SOT1990-1)

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