

# 74LVC3G06

## Triple inverter with open-drain output

Rev. 11 — 28 March 2013

Product data sheet

### 1. General description

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The 74LVC3G06 provides three inverting buffers.

The output of this device is an open drain and can be connected to other open-drain outputs to implement active-LOW wired-OR or active-HIGH wired-AND functions.

Inputs can be driven from either 3.3 V or 5 V devices. This feature allows the use of this device in a mixed 3.3 V and 5 V environment.

Schmitt trigger action at all inputs makes the circuit tolerant for slower input rise and fall time.

This device is fully specified for partial power-down applications using  $I_{OFF}$ . The  $I_{OFF}$  circuitry disables the output, preventing a damaging backflow current through the device when it is powered down.

### 2. Features and benefits

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- Wide supply voltage range from 1.65 V to 5.5 V
- 5 V tolerant input/output for interfacing with 5 V logic
- High noise immunity
- Complies with JEDEC standard:
  - ◆ JESD8-7 (1.65 V to 1.95 V)
  - ◆ JESD8-5 (2.3 V to 2.7 V)
  - ◆ JESD8-B/JESD36 (2.7 V to 3.6 V)
- ESD protection:
  - ◆ HBM JESD22-A114F exceeds 2000 V
  - ◆ MM JESD22-A115-A exceeds 200 V
- -24 mA output drive ( $V_{CC} = 3.0$  V)
- CMOS low power consumption
- Latch-up performance exceeds 250 mA
- Direct interface with TTL levels
- Inputs accept voltages up to 5 V
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C



### 3. Ordering information

Table 1. Ordering information

| Type number | Package           |        |                                                                                             |          |
|-------------|-------------------|--------|---------------------------------------------------------------------------------------------|----------|
|             | Temperature range | Name   | Description                                                                                 | Version  |
| 74LVC3G06DP | −40 °C to +125 °C | TSSOP8 | plastic thin shrink small outline package; 8 leads; body width 3 mm; lead length 0.5 mm     | SOT505-2 |
| 74LVC3G06DC | −40 °C to +125 °C | VSSOP8 | plastic very thin shrink small outline package; 8 leads; body width 2.3 mm                  | SOT765-1 |
| 74LVC3G06GT | −40 °C to +125 °C | XSON8  | plastic extremely thin small outline package; no leads; 8 terminals; body 1 × 1.95 × 0.5 mm | SOT833-1 |
| 74LVC3G06GF | −40 °C to +125 °C | XSON8  | extremely thin small outline package; no leads; 8 terminals; body 1.35 × 1 × 0.5 mm         | SOT1089  |
| 74LVC3G06GD | −40 °C to +125 °C | XSON8  | plastic extremely thin small outline package; no leads; 8 terminals; body 3 × 2 × 0.5 mm    | SOT996-2 |
| 74LVC3G06GM | −40 °C to +125 °C | XQFN8  | plastic, extremely thin quad flat package; no leads; 8 terminals; body 1.6 × 1.6 × 0.5 mm   | SOT902-2 |
| 74LVC3G06GN | −40 °C to +125 °C | XSON8  | extremely thin small outline package; no leads; 8 terminals; body 1.2 × 1.0 × 0.35 mm       | SOT1116  |
| 74LVC3G06GS | −40 °C to +125 °C | XSON8  | extremely thin small outline package; no leads; 8 terminals; body 1.35 × 1.0 × 0.35 mm      | SOT1203  |

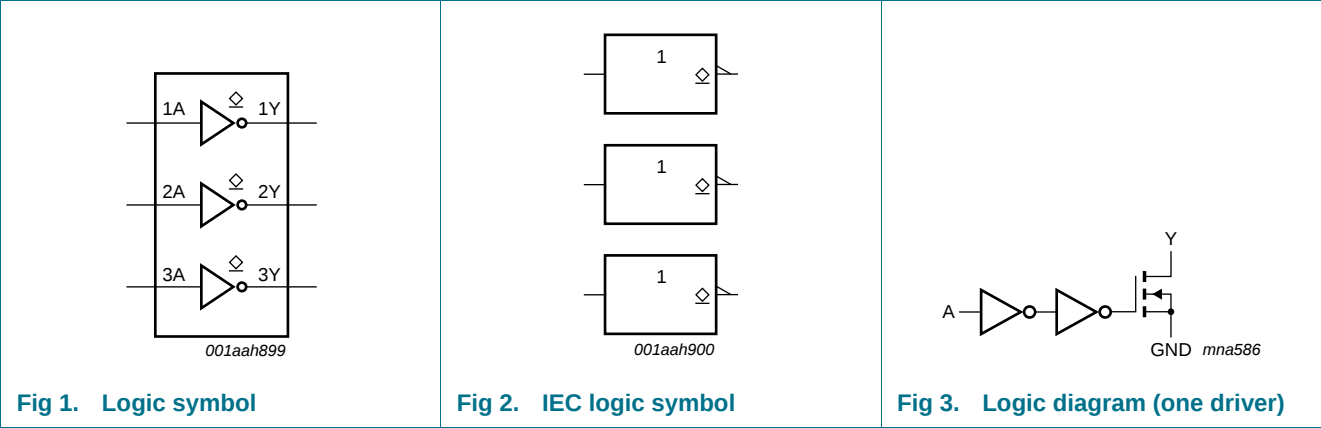
### 4. Marking

Table 2. Marking codes

| Type number | Marking code <sup>[1]</sup> |
|-------------|-----------------------------|
| 74LVC3G06DP | V06                         |
| 74LVC3G06DC | V06                         |
| 74LVC3G06GT | V06                         |
| 74LVC3G06GF | V6                          |
| 74LVC3G06GD | V06                         |
| 74LVC3G06GM | V06                         |
| 74LVC3G06GN | V6                          |
| 74LVC3G06GS | V6                          |

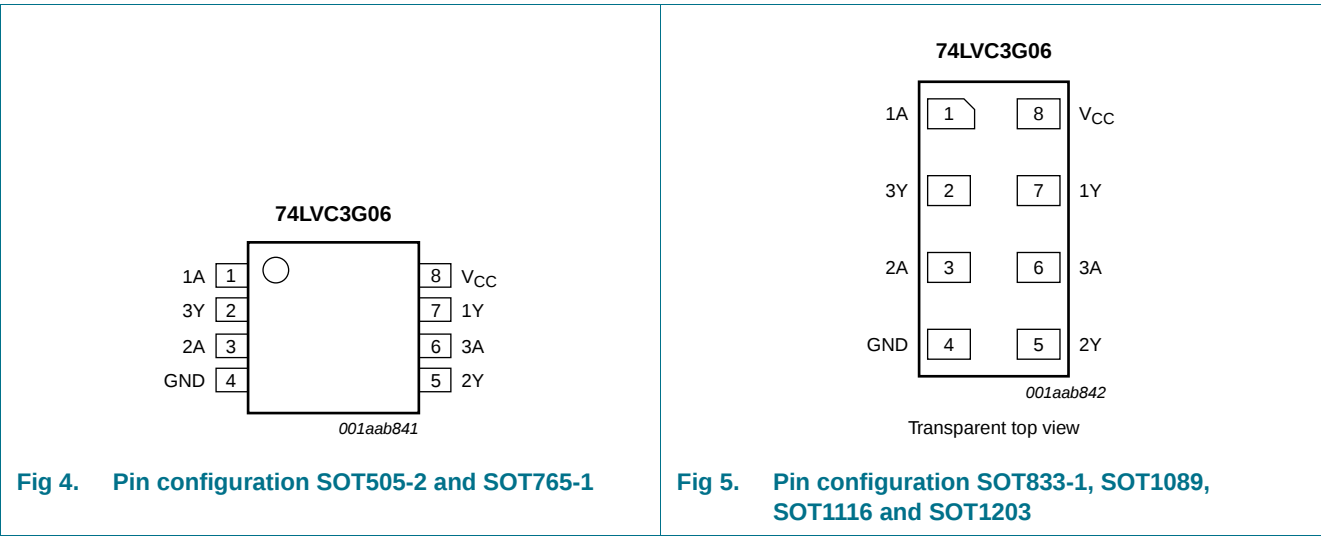
[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

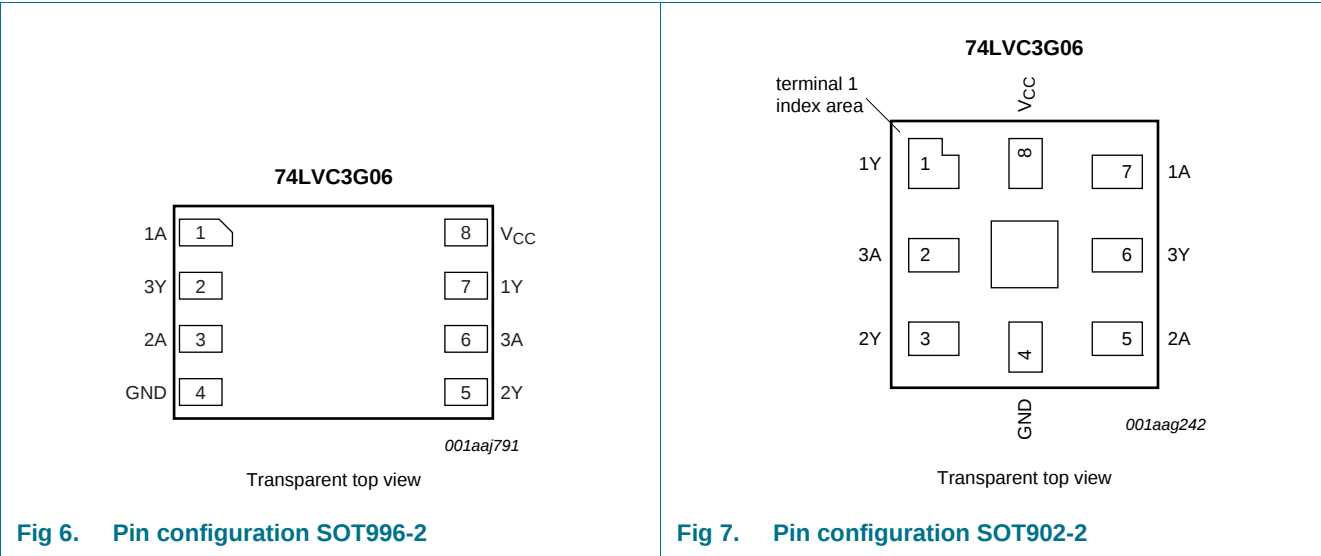
5. Functional diagram



6. Pinning information

6.1 Pinning





6.2 Pin description

Table 3. Pin description

| Symbol          | Pin                                                                  |          | Description    |
|-----------------|----------------------------------------------------------------------|----------|----------------|
|                 | SOT505-2, SOT765-1, SOT833-1, SOT1089, SOT996-2, SOT1116 and SOT1203 | SOT902-2 |                |
| 1A, 2A, 3A      | 1, 3, 6                                                              | 7, 5, 2  | data input     |
| 1Y, 2Y, 3Y      | 7, 5, 2                                                              | 1, 3, 6  | data output    |
| GND             | 4                                                                    | 4        | ground (0 V)   |
| V <sub>CC</sub> | 8                                                                    | 8        | supply voltage |

7. Functional description

Table 4. Function table<sup>[1]</sup>

| Input nA | Output nY |
|----------|-----------|
| L        | Z         |
| H        | L         |

[1] H = HIGH voltage level; L = LOW voltage level; Z = high-impedance OFF-state.

## 8. Limiting values

**Table 5. Limiting values**

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

| Symbol    | Parameter               | Conditions                    | Min         | Max  | Unit |
|-----------|-------------------------|-------------------------------|-------------|------|------|
| $V_{CC}$  | supply voltage          |                               | -0.5        | +6.5 | V    |
| $I_{IK}$  | input clamping current  | $V_I < 0$ V                   | -50         | -    | mA   |
| $V_I$     | input voltage           |                               | [1] -0.5    | +6.5 | V    |
| $I_{OK}$  | output clamping current | $V_O < 0$ V                   | -50         | -    | mA   |
| $V_O$     | output voltage          | Active mode                   | [1] -0.5    | +6.5 | V    |
|           |                         | Power-down mode               | [1][2] -0.5 | +6.5 | V    |
| $I_O$     | output current          | $V_O = 0$ V to 6.5 V          | -           | 50   | mA   |
| $I_{CC}$  | supply current          |                               | -           | 100  | mA   |
| $I_{GND}$ | ground current          |                               | -100        | -    | mA   |
| $T_{stg}$ | storage temperature     |                               | -65         | +150 | °C   |
| $P_{tot}$ | total power dissipation | $T_{amb} = -40$ °C to +125 °C | [3] -       | 250  | mW   |

[1] The minimum input and output voltage ratings may be exceeded if the input and output current ratings are observed.

[2] When  $V_{CC} = 0$  V (Power-down mode), the output voltage can be 5.5 V in normal operation.

[3] For TSSOP8 and VSSOP8 packages: above 110 °C the value of  $P_{tot}$  derates linearly at 8.0 mW/K.  
For XSON8 and XQFN8 packages: above 118 °C the value of  $P_{tot}$  derates linearly with 7.8 mW/K.

## 9. Recommended operating conditions

**Table 6. Operating conditions**

| Symbol              | Parameter                           | Conditions                      | Min  | Max  | Unit |
|---------------------|-------------------------------------|---------------------------------|------|------|------|
| $V_{CC}$            | supply voltage                      |                                 | 1.65 | 5.5  | V    |
| $V_I$               | input voltage                       |                                 | 0    | 5.5  | V    |
| $V_O$               | output voltage                      | Active mode                     | 0    | 5.5  | V    |
|                     |                                     | Power-down mode; $V_{CC} = 0$ V | 0    | 5.5  | V    |
| $T_{amb}$           | ambient temperature                 |                                 | -40  | +125 | °C   |
| $\Delta t/\Delta V$ | input transition rise and fall rate | $V_{CC} = 1.65$ V to 2.7 V      | -    | 20   | ns/V |
|                     |                                     | $V_{CC} = 2.7$ V to 5.5 V       | -    | 10   | ns/V |

## 10. Static characteristics

**Table 7. Static characteristics**

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

| Symbol                                                  | Parameter                 | Conditions                                                                                                                | Min                    | Typ  | Max                    | Unit |
|---------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------|------|------------------------|------|
| <b>T<sub>amb</sub> = -40 °C to +85 °C<sup>[1]</sup></b> |                           |                                                                                                                           |                        |      |                        |      |
| V <sub>IH</sub>                                         | HIGH-level input voltage  | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                                        | 0.65 × V <sub>CC</sub> | -    | -                      | V    |
|                                                         |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                          | 1.7                    | -    | -                      | V    |
|                                                         |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                          | 2.0                    | -    | -                      | V    |
|                                                         |                           | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                          | 0.7 × V <sub>CC</sub>  | -    | -                      | V    |
| V <sub>IL</sub>                                         | LOW-level input voltage   | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                                        | -                      | -    | 0.35 × V <sub>CC</sub> | V    |
|                                                         |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                          | -                      | -    | 0.7                    | V    |
|                                                         |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                          | -                      | -    | 0.8                    | V    |
|                                                         |                           | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                          | -                      | -    | 0.3 × V <sub>CC</sub>  | V    |
| V <sub>OL</sub>                                         | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>                                                                       |                        |      |                        |      |
|                                                         |                           | I <sub>O</sub> = 100 μA; V <sub>CC</sub> = 1.65 V to 5.5 V                                                                | -                      | -    | 0.10                   | V    |
|                                                         |                           | I <sub>O</sub> = 4 mA; V <sub>CC</sub> = 1.65 V                                                                           | -                      | -    | 0.45                   | V    |
|                                                         |                           | I <sub>O</sub> = 8 mA; V <sub>CC</sub> = 2.3 V                                                                            | -                      | -    | 0.30                   | V    |
|                                                         |                           | I <sub>O</sub> = 12 mA; V <sub>CC</sub> = 2.7 V                                                                           | -                      | -    | 0.40                   | V    |
|                                                         |                           | I <sub>O</sub> = 24 mA; V <sub>CC</sub> = 3.0 V                                                                           | -                      | -    | 0.55                   | V    |
|                                                         |                           | I <sub>O</sub> = 32 mA; V <sub>CC</sub> = 4.5 V                                                                           | -                      | -    | 0.55                   | V    |
| I <sub>I</sub>                                          | input leakage current     | V <sub>I</sub> = 5.5 V or GND;<br>V <sub>CC</sub> = 0 V to 5.5 V                                                          | <sup>[2]</sup> -       | ±0.1 | ±5                     | μA   |
| I <sub>OZ</sub>                                         | OFF-state output current  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>O</sub> = V <sub>CC</sub> or GND;<br>V <sub>CC</sub> = 5.5 V | -                      | ±0.1 | ±10                    | μA   |
| I <sub>OFF</sub>                                        | power-off leakage current | V <sub>I</sub> or V <sub>O</sub> = 5.5 V; V <sub>CC</sub> = 0 V                                                           | -                      | ±0.1 | ±10                    | μA   |
| I <sub>CC</sub>                                         | supply current            | V <sub>I</sub> = 5.5 V or GND; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 1.65 V to 5.5 V                                 | -                      | 0.1  | 10                     | μA   |
| ΔI <sub>CC</sub>                                        | additional supply current | per pin; V <sub>I</sub> = V <sub>CC</sub> - 0.6 V; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 2.3 V to 5.5 V              | <sup>[2]</sup> -       | 5    | 500                    | μA   |
| C <sub>I</sub>                                          | input capacitance         |                                                                                                                           | -                      | 2.5  | -                      | pF   |

**Table 7.** Static characteristics ...continued

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

| Symbol                                     | Parameter                 | Conditions                                                                                                                | Min                    | Typ | Max                    | Unit |
|--------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------|-----|------------------------|------|
| <b>T<sub>amb</sub> = -40 °C to +125 °C</b> |                           |                                                                                                                           |                        |     |                        |      |
| V <sub>IH</sub>                            | HIGH-level input voltage  | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                                        | 0.65 × V <sub>CC</sub> | -   | -                      | V    |
|                                            |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                          | 1.7                    | -   | -                      | V    |
|                                            |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                          | 2.0                    | -   | -                      | V    |
|                                            |                           | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                          | 0.7 × V <sub>CC</sub>  | -   | -                      | V    |
| V <sub>IL</sub>                            | LOW-level input voltage   | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                                        | -                      | -   | 0.35 × V <sub>CC</sub> | V    |
|                                            |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                          | -                      | -   | 0.7                    | V    |
|                                            |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                          | -                      | -   | 0.8                    | V    |
|                                            |                           | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                          | -                      | -   | 0.3 × V <sub>CC</sub>  | V    |
| V <sub>OL</sub>                            | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>                                                                       |                        |     |                        |      |
|                                            |                           | I <sub>O</sub> = 100 μA; V <sub>CC</sub> = 1.65 V to 5.5 V                                                                | -                      | -   | 0.10                   | V    |
|                                            |                           | I <sub>O</sub> = 4 mA; V <sub>CC</sub> = 1.65 V                                                                           | -                      | -   | 0.70                   | V    |
|                                            |                           | I <sub>O</sub> = 8 mA; V <sub>CC</sub> = 2.3 V                                                                            | -                      | -   | 0.45                   | V    |
|                                            |                           | I <sub>O</sub> = 12 mA; V <sub>CC</sub> = 2.7 V                                                                           | -                      | -   | 0.60                   | V    |
|                                            |                           | I <sub>O</sub> = 24 mA; V <sub>CC</sub> = 3.0 V                                                                           | -                      | -   | 0.80                   | V    |
|                                            |                           | I <sub>O</sub> = 32 mA; V <sub>CC</sub> = 4.5 V                                                                           | -                      | -   | 0.80                   | V    |
| I <sub>I</sub>                             | input leakage current     | V <sub>I</sub> = 5.5 V or GND;<br>V <sub>CC</sub> = 0 V to 5.5 V                                                          | -                      | -   | ±20                    | μA   |
| I <sub>OZ</sub>                            | OFF-state output current  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>O</sub> = V <sub>CC</sub> or GND;<br>V <sub>CC</sub> = 5.5 V | -                      | -   | ±10                    | μA   |
| I <sub>OFF</sub>                           | power-off leakage current | V <sub>I</sub> or V <sub>O</sub> = 5.5 V; V <sub>CC</sub> = 0 V                                                           | -                      | -   | ±20                    | μA   |
| I <sub>CC</sub>                            | supply current            | V <sub>I</sub> = 5.5 V or GND; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 1.65 V to 5.5 V                                 | -                      | -   | 40                     | μA   |
| ΔI <sub>CC</sub>                           | additional supply current | per pin; V <sub>I</sub> = V <sub>CC</sub> - 0.6 V; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 2.3 V to 5.5 V              | -                      | -   | 5000                   | μA   |

[1] All typical values are measured at T<sub>amb</sub> = 25 °C.[2] These typical values are measured at V<sub>CC</sub> = 3.3 V.

## 11. Dynamic characteristics

**Table 8. Dynamic characteristics**

Voltages are referenced to GND (ground = 0 V). For test circuit see [Figure 9](#).

| Symbol   | Parameter                     | Conditions                                                           | –40 °C to +85 °C |                    |     | –40 °C to +125 °C |     | Unit |
|----------|-------------------------------|----------------------------------------------------------------------|------------------|--------------------|-----|-------------------|-----|------|
|          |                               |                                                                      | Min              | Typ <sup>[1]</sup> | Max | Min               | Max |      |
| $t_{pd}$ | propagation delay             | nA to nY; see <a href="#">Figure 8</a> <sup>[2]</sup>                |                  |                    |     |                   |     |      |
|          |                               | $V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$                         | 1.0              | 2.6                | 6.5 | 1.0               | 8.2 | ns   |
|          |                               | $V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$                           | 0.5              | 1.6                | 3.9 | 0.5               | 4.9 | ns   |
|          |                               | $V_{CC} = 2.7 \text{ V}$                                             | 1.0              | 2.2                | 4.2 | 1.0               | 5.3 | ns   |
|          |                               | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$                           | 0.5              | 2.0                | 3.4 | 0.5               | 4.3 | ns   |
|          |                               | $V_{CC} = 4.5 \text{ V to } 5.5 \text{ V}$                           | 0.5              | 1.4                | 2.9 | 0.5               | 3.7 | ns   |
| $C_{PD}$ | power dissipation capacitance | $V_I = \text{GND to } V_{CC}; V_{CC} = 3.3 \text{ V}$ <sup>[3]</sup> | -                | 5.9                | -   | -                 | -   | pF   |

[1] Typical values are measured at  $T_{amb} = 25 \text{ °C}$  and  $V_{CC} = 1.8 \text{ V}, 2.5 \text{ V}, 2.7 \text{ V}, 3.3 \text{ V}$  and  $5.0 \text{ V}$  respectively.

[2]  $t_{pd}$  is the same as  $t_{PLZ}$  and  $t_{PZL}$ .

[3]  $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu\text{W}$ ).

$P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma(C_L \times V_{CC}^2 \times f_o)$  where:

$f_i$  = input frequency in MHz;

$f_o$  = output frequency in MHz;

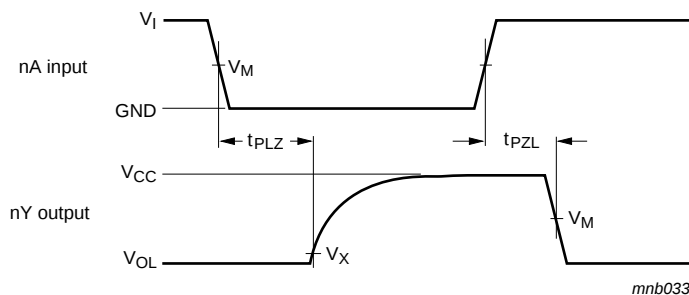
$C_L$  = output load capacitance in pF;

$V_{CC}$  = supply voltage in V;

$N$  = number of inputs switching;

$\Sigma(C_L \times V_{CC}^2 \times f_o)$  = sum of outputs.

## 12. Waveforms



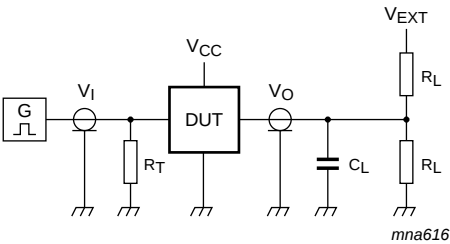
Measurement points are given in [Table 9](#).

$V_{OL}$  is the typical output voltage level that occurs with the output load.

**Fig 8. The input (nA) to output (nY) propagation delays**

Table 9. Measurement points

| Supply voltage   | Input                 | Output                |                          |
|------------------|-----------------------|-----------------------|--------------------------|
| V <sub>CC</sub>  | V <sub>M</sub>        | V <sub>M</sub>        | V <sub>X</sub>           |
| 1.65 V to 1.95 V | 0.5 × V <sub>CC</sub> | 0.5 × V <sub>CC</sub> | V <sub>OL</sub> + 0.15 V |
| 2.3 V to 2.7 V   | 0.5 × V <sub>CC</sub> | 0.5 × V <sub>CC</sub> | V <sub>OL</sub> + 0.15 V |
| 2.7 V            | 1.5 V                 | 1.5 V                 | V <sub>OL</sub> + 0.3 V  |
| 3.0 V to 3.6 V   | 1.5 V                 | 1.5 V                 | V <sub>OL</sub> + 0.3 V  |
| 4.5 V to 5.5 V   | 0.5 × V <sub>CC</sub> | 0.5 × V <sub>CC</sub> | V <sub>OL</sub> + 0.3 V  |



Test data is given in [Table 10](#).  
Definitions for test circuit:  
R<sub>L</sub> = Load resistance.  
C<sub>L</sub> = Load capacitance including jig and probe capacitance.  
R<sub>T</sub> = Termination resistance should be equal to the output impedance Z<sub>o</sub> of the pulse generator.  
V<sub>EXT</sub> = External voltage for measuring switching times.

Fig 9. Test circuit for measuring switching times

Table 10. Test data

| Supply voltage   | Input           |                                 | Load           |                | V <sub>EXT</sub>                    |
|------------------|-----------------|---------------------------------|----------------|----------------|-------------------------------------|
| V <sub>CC</sub>  | V <sub>I</sub>  | t <sub>r</sub> , t <sub>f</sub> | C <sub>L</sub> | R <sub>L</sub> | t <sub>PZL</sub> , t <sub>PLZ</sub> |
| 1.65 V to 1.95 V | V <sub>CC</sub> | ≤ 2.0 ns                        | 30 pF          | 1 kΩ           | 2 × V <sub>CC</sub>                 |
| 2.3 V to 2.7 V   | V <sub>CC</sub> | ≤ 2.0 ns                        | 30 pF          | 500 Ω          | 2 × V <sub>CC</sub>                 |
| 2.7 V            | 2.7 V           | ≤ 2.5 ns                        | 50 pF          | 500 Ω          | 6 V                                 |
| 3.0 V to 3.6 V   | 2.7 V           | ≤ 2.5 ns                        | 50 pF          | 500 Ω          | 6 V                                 |
| 4.5 V to 5.5 V   | V <sub>CC</sub> | ≤ 2.5 ns                        | 50 pF          | 500 Ω          | 2 × V <sub>CC</sub>                 |

13. Package outline

TSSOP8: plastic thin shrink small outline package; 8 leads; body width 3 mm; lead length 0.5 mm    SOT505-2

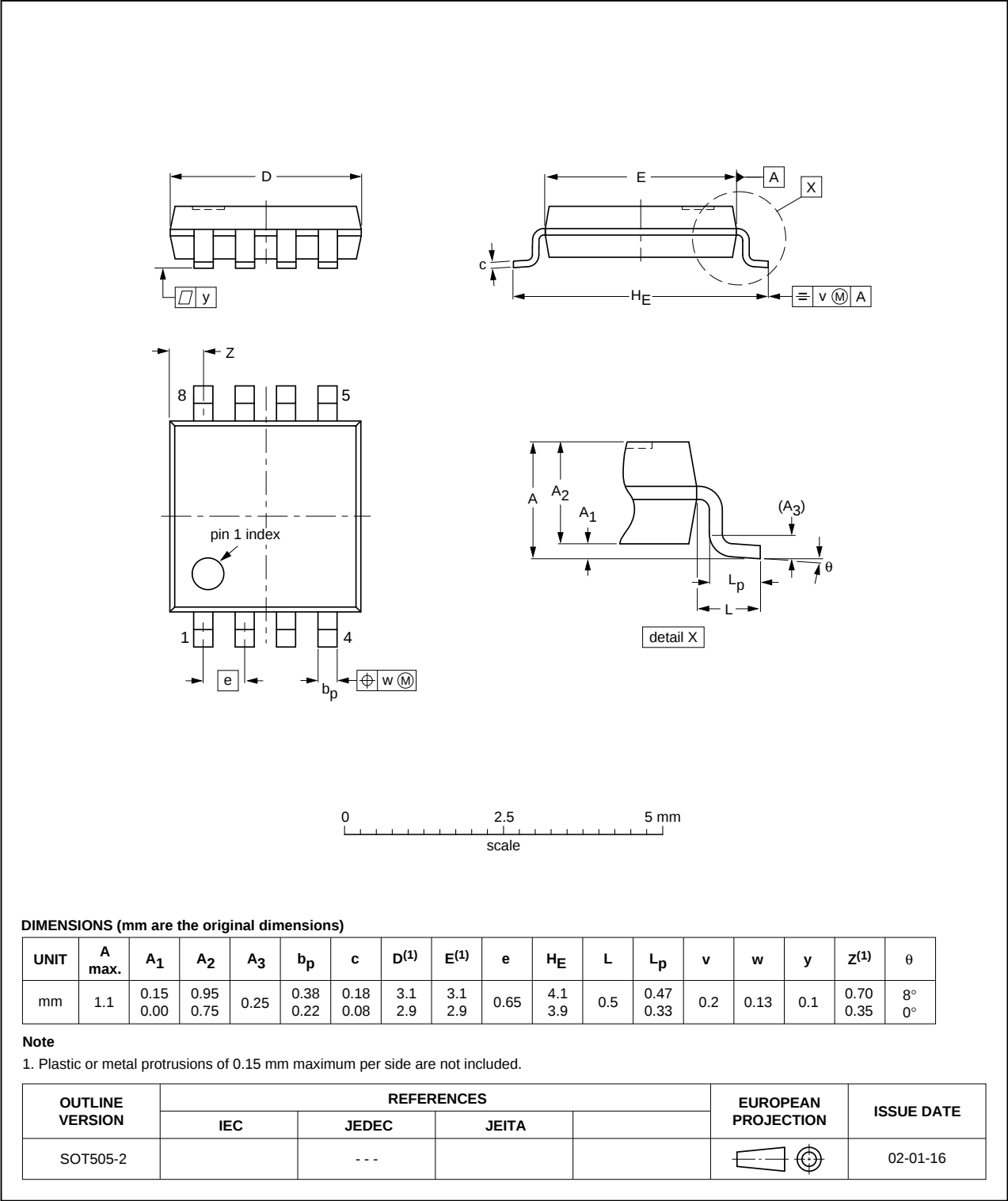


Fig 10. Package outline SOT505-2 (TSSOP8)

VSSOP8: plastic very thin shrink small outline package; 8 leads; body width 2.3 mm

SOT765-1

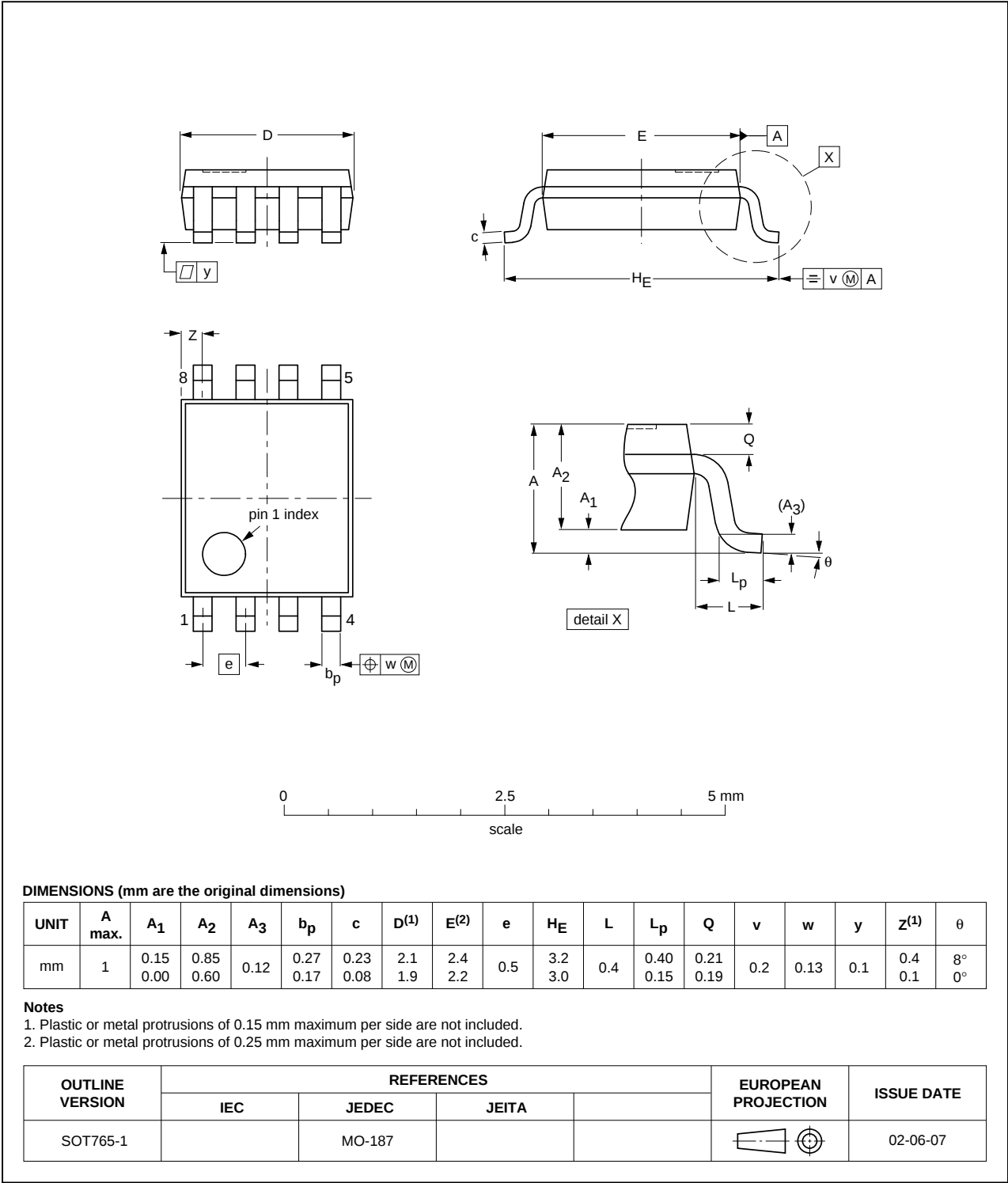


Fig 11. Package outline SOT765-1 (VSSOP8)

XSON8: plastic extremely thin small outline package; no leads; 8 terminals; body 1 x 1.95 x 0.5 mm

SOT833-1

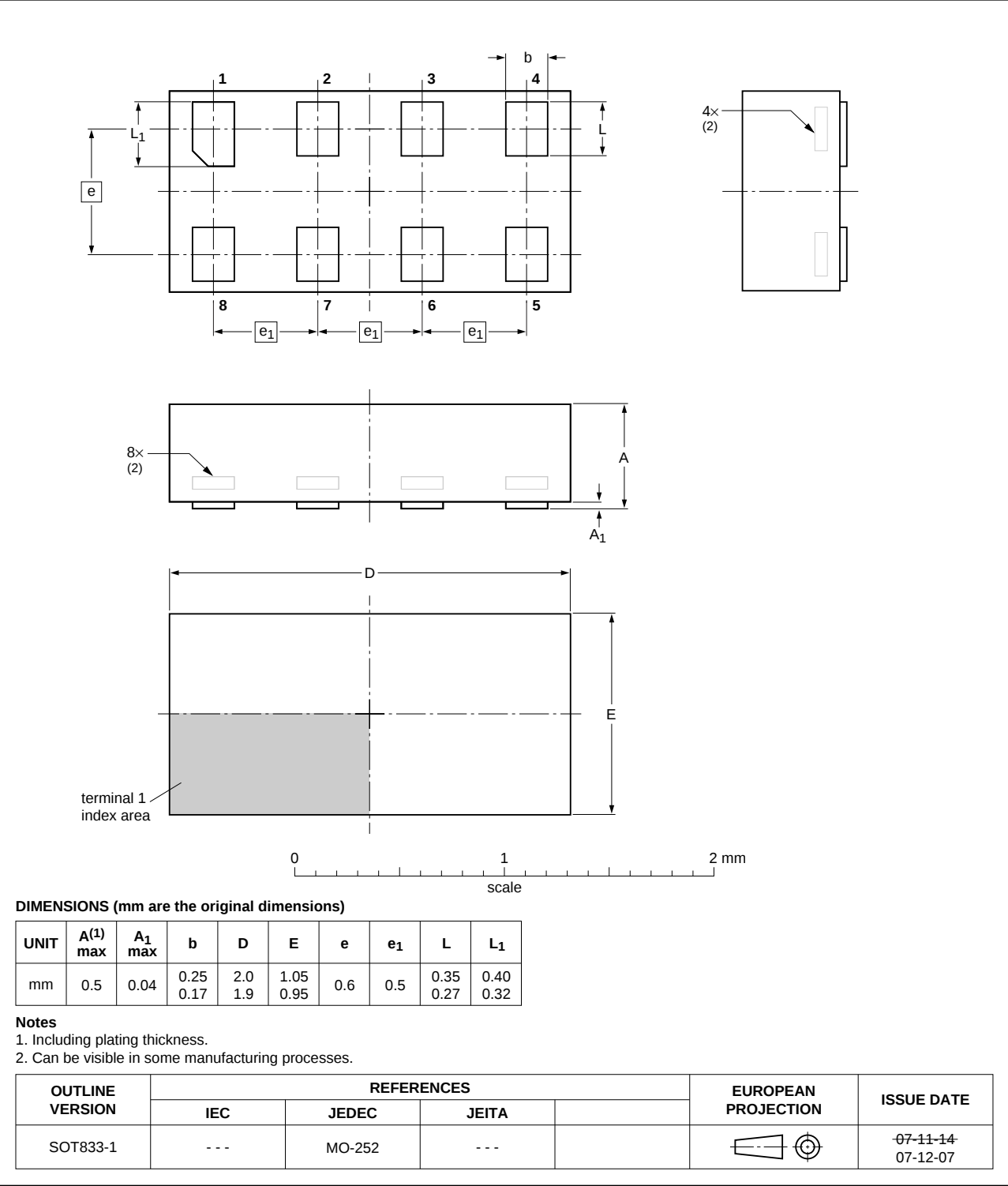


Fig 12. Package outline SOT833-1 (XSON8)

XSON8: extremely thin small outline package; no leads;  
8 terminals; body 1.35 x 1 x 0.5 mm

SOT1089

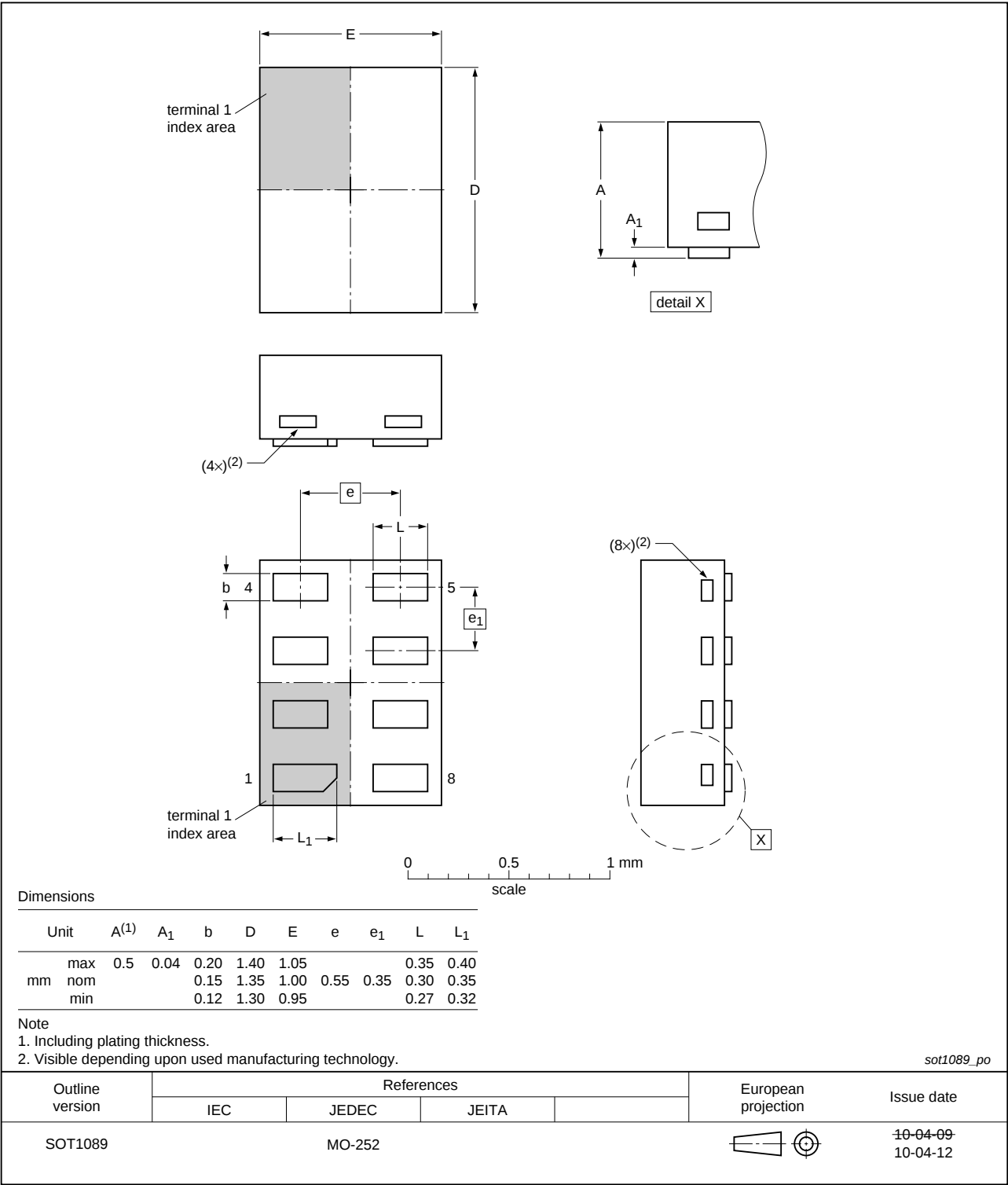


Fig 13. Package outline SOT1089 (XSON8)

XSON8: plastic extremely thin small outline package; no leads;  
8 terminals; body 3 x 2 x 0.5 mm

SOT996-2

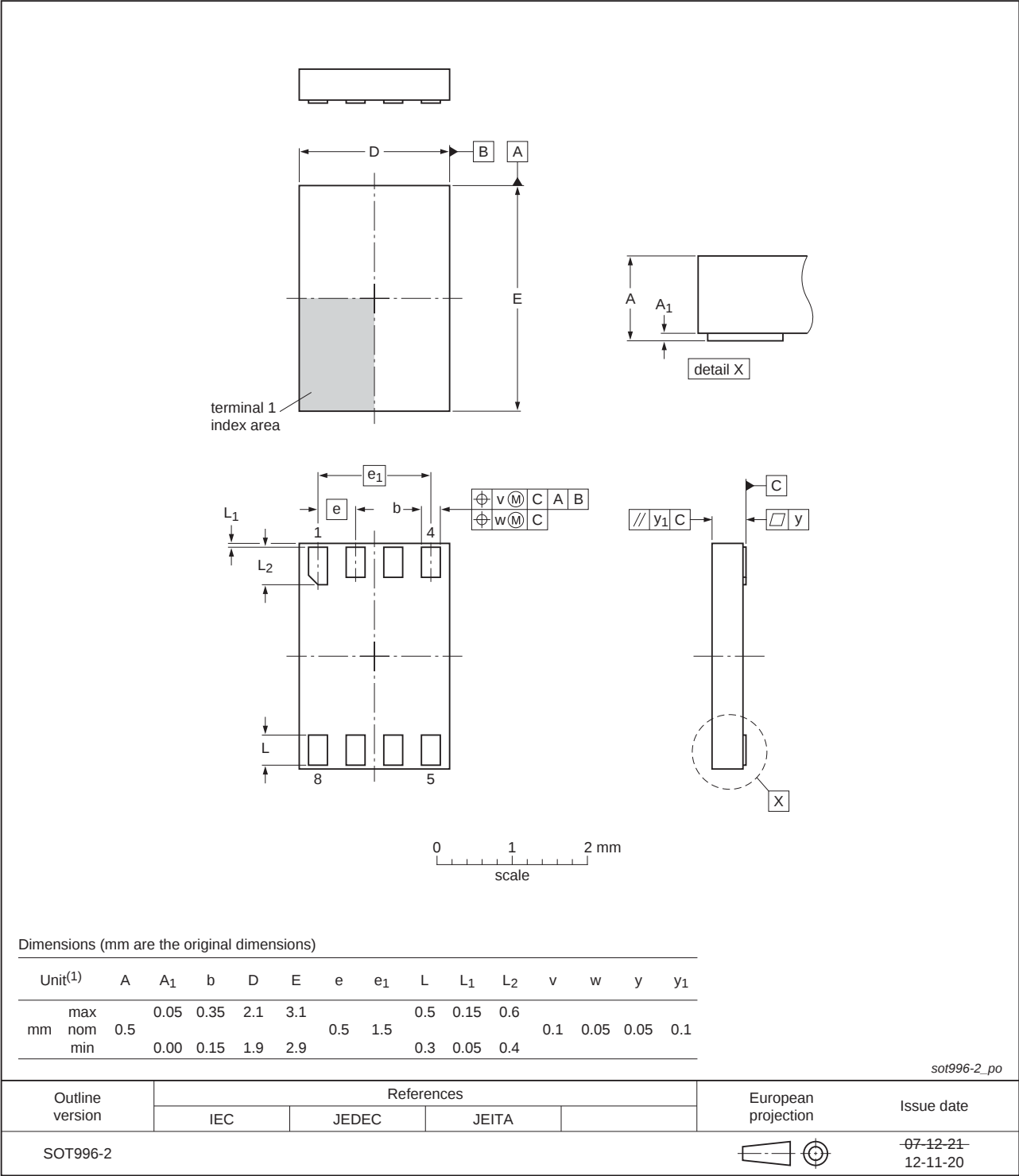


Fig 14. Package outline SOT996-2 (XSON8)

XQFN8: plastic, extremely thin quad flat package; no leads;  
8 terminals; body 1.6 x 1.6 x 0.5 mm

SOT902-2

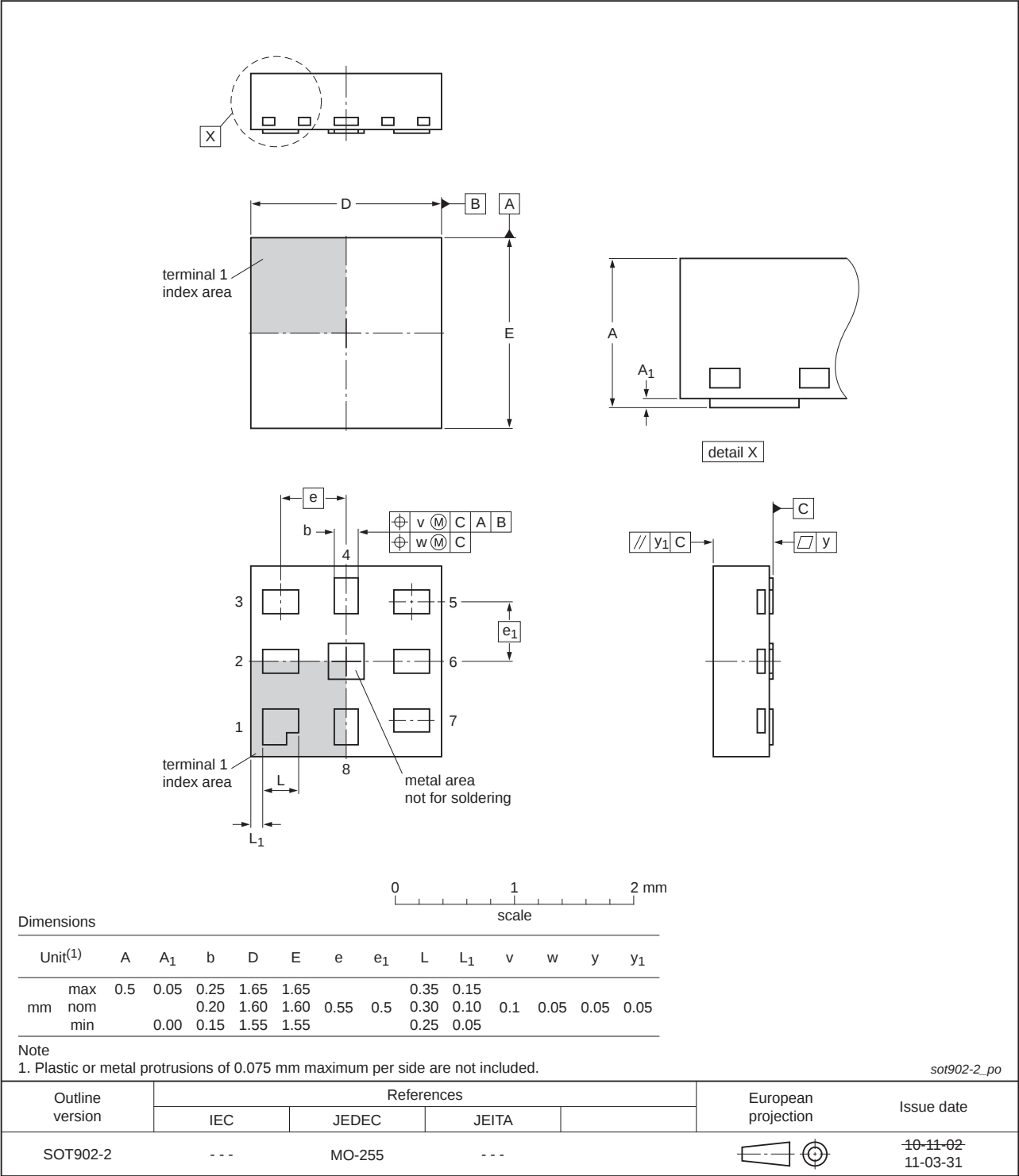
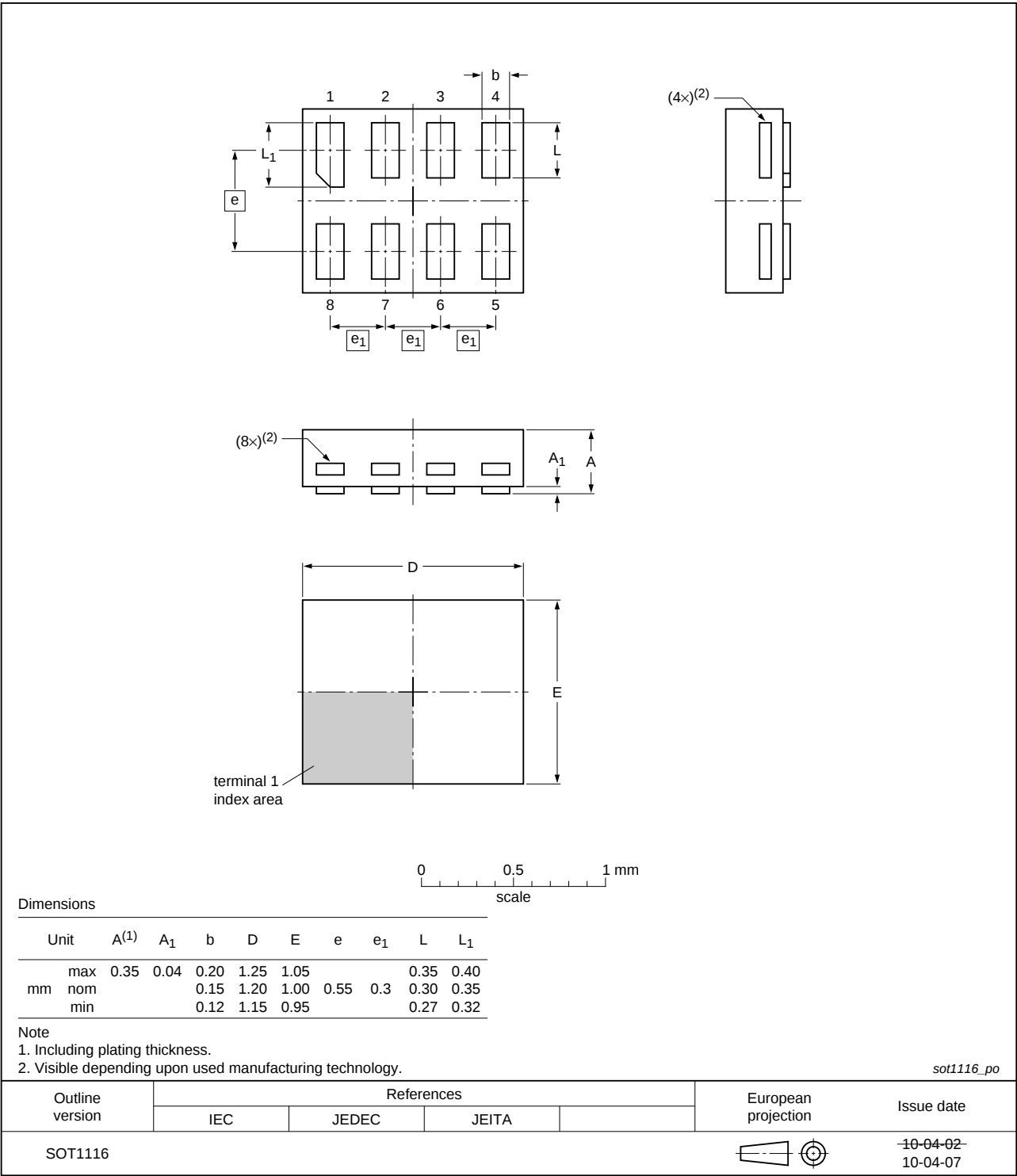


Fig 15. Package outline SOT902-2 (XQFN8)

XSON8: extremely thin small outline package; no leads;  
8 terminals; body 1.2 x 1.0 x 0.35 mm

SOT1116



XSON8: extremely thin small outline package; no leads;  
8 terminals; body 1.35 x 1.0 x 0.35 mm

SOT1203

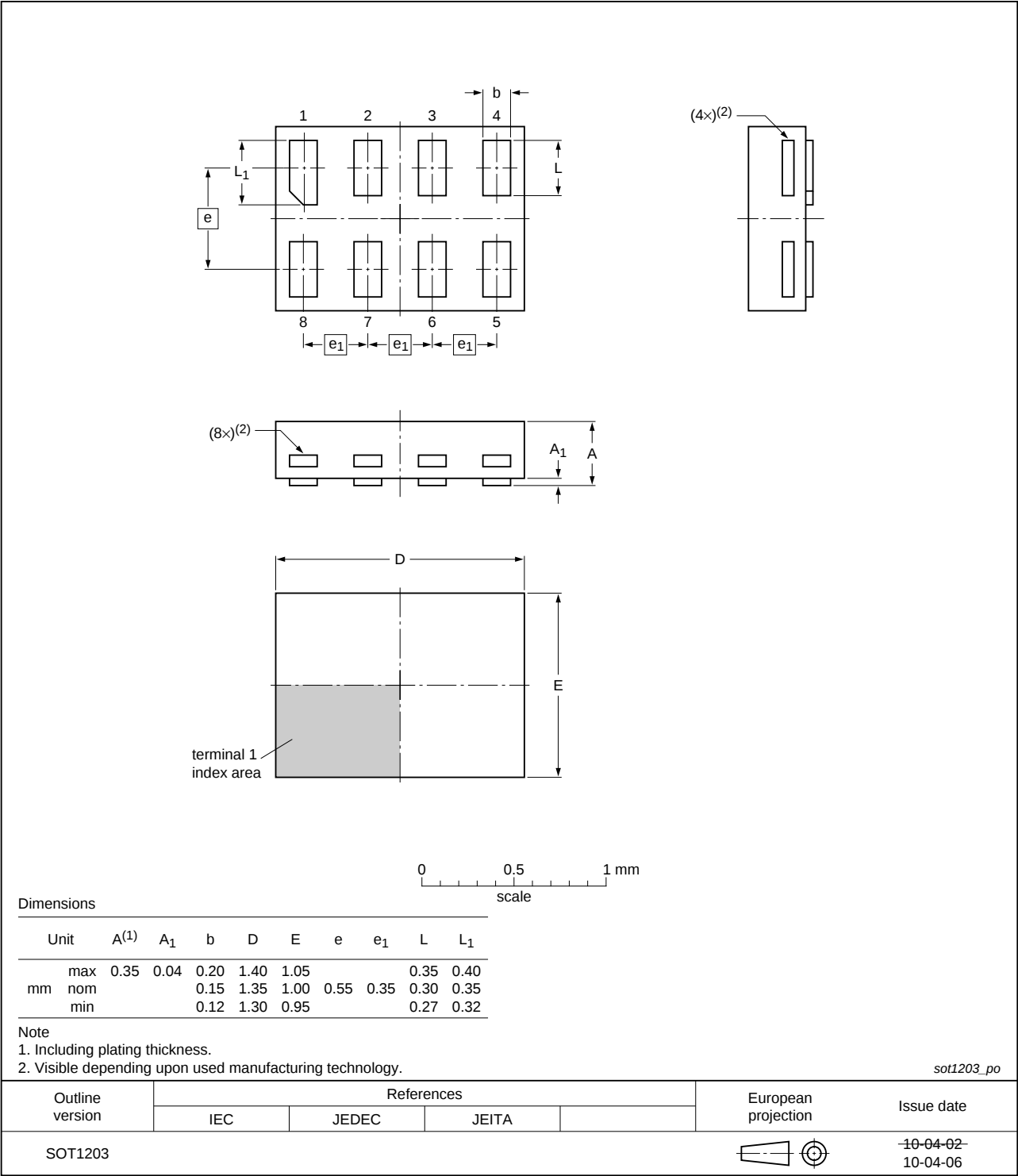


Fig 17. Package outline SOT1203 (XSON8)

## 14. Abbreviations

Table 11. Abbreviations

| Acronym | Description                             |
|---------|-----------------------------------------|
| CMOS    | Complementary Metal-Oxide Semiconductor |
| DUT     | Device Under Test                       |
| ESD     | ElectroStatic Discharge                 |
| HBM     | Human Body Model                        |
| MM      | Machine Model                           |
| TTL     | Transistor-Transistor Logic             |

## 15. Revision history

Table 12. Revision history

| Document ID    | Release date                                                        | Data sheet status  | Change notice | Supersedes     |
|----------------|---------------------------------------------------------------------|--------------------|---------------|----------------|
| 74LVC3G06 v.11 | 20130328                                                            | Product data sheet | -             | 74LVC3G06 v.10 |
| Modifications: | • For type number 74LVC3G06GD XSON8U has changed to XSON8.          |                    |               |                |
| 74LVC3G06 v.10 | 20120627                                                            | Product data sheet | -             | 74LVC3G06 v.9  |
| Modifications: | • For type number 74LVC3G06GM the SOT code has changed to SOT902-2. |                    |               |                |
| 74LVC3G06 v.9  | 20111123                                                            | Product data sheet | -             | 74LVC3G06 v.8  |
| Modifications: | • Legal pages updated.                                              |                    |               |                |
| 74LVC3G06 v.8  | 20100809                                                            | Product data sheet | -             | 74LVC3G06 v.7  |
| 74LVC3G06 v.7  | 20090312                                                            | Product data sheet | -             | 74LVC3G06 v.6  |
| 74LVC3G06 v.6  | 20080403                                                            | Product data sheet | -             | 74LVC3G06 v.5  |
| 74LVC3G06 v.5  | 20070521                                                            | Product data sheet | -             | 74LVC3G06 v.4  |
| 74LVC3G06 v.4  | 20060302                                                            | Product data sheet | -             | 74LVC3G06 v.3  |
| 74LVC3G06 v.3  | 20050201                                                            | Product data sheet | -             | 74LVC3G06 v.2  |
| 74LVC3G06 v.2  | 20041021                                                            | Product data sheet | -             | 74LVC3G06 v.1  |
| 74LVC3G06 v.1  | 20040607                                                            | Product data sheet | -             | -              |

## 16. Legal information

### 16.1 Data sheet status

| Document status <sup>[1][2]</sup> | Product status <sup>[3]</sup> | Definition                                                                            |
|-----------------------------------|-------------------------------|---------------------------------------------------------------------------------------|
| Objective [short] data sheet      | Development                   | This document contains data from the objective specification for product development. |
| Preliminary [short] data sheet    | Qualification                 | This document contains data from the preliminary specification.                       |
| Product [short] data sheet        | Production                    | This document contains the product specification.                                     |

[1] Please consult the most recently issued document before initiating or completing a design.

[2] The term 'short data sheet' is explained in section "Definitions".

[3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL <http://www.nxp.com>.

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## 18. Contents

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|           |                                               |           |
|-----------|-----------------------------------------------|-----------|
| <b>1</b>  | <b>General description</b> .....              | <b>1</b>  |
| <b>2</b>  | <b>Features and benefits</b> .....            | <b>1</b>  |
| <b>3</b>  | <b>Ordering information</b> .....             | <b>2</b>  |
| <b>4</b>  | <b>Marking</b> .....                          | <b>2</b>  |
| <b>5</b>  | <b>Functional diagram</b> .....               | <b>3</b>  |
| <b>6</b>  | <b>Pinning information</b> .....              | <b>3</b>  |
| 6.1       | Pinning .....                                 | 3         |
| 6.2       | Pin description .....                         | 4         |
| <b>7</b>  | <b>Functional description</b> .....           | <b>4</b>  |
| <b>8</b>  | <b>Limiting values</b> .....                  | <b>5</b>  |
| <b>9</b>  | <b>Recommended operating conditions</b> ..... | <b>5</b>  |
| <b>10</b> | <b>Static characteristics</b> .....           | <b>6</b>  |
| <b>11</b> | <b>Dynamic characteristics</b> .....          | <b>8</b>  |
| <b>12</b> | <b>Waveforms</b> .....                        | <b>8</b>  |
| <b>13</b> | <b>Package outline</b> .....                  | <b>10</b> |
| <b>14</b> | <b>Abbreviations</b> .....                    | <b>18</b> |
| <b>15</b> | <b>Revision history</b> .....                 | <b>18</b> |
| <b>16</b> | <b>Legal information</b> .....                | <b>19</b> |
| 16.1      | Data sheet status .....                       | 19        |
| 16.2      | Definitions .....                             | 19        |
| 16.3      | Disclaimers .....                             | 19        |
| 16.4      | Trademarks .....                              | 20        |
| <b>17</b> | <b>Contact information</b> .....              | <b>20</b> |
| <b>18</b> | <b>Contents</b> .....                         | <b>21</b> |

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