



SOT684-21(DDSC)

HVQFN56, plastic, thermally enhanced very thin quad flat package, no-leads, wettable flanks; 56 terminals; 0.5 mm pitch; 8 mm x 8 mm x 0.85 mm body

20 May 2019

Package information

1 Package summary

| | |
|---------------------------------------|--|
| Terminal position code | Q (quad) |
| Package type descriptive code | HVQFN56 |
| Package style descriptive code | HVQFN (thermal enhanced very thin quad flatpack; no leads) |
| Package body material type | P (plastic) |
| Mounting method type | S (surface mount) |
| Issue date | 30-10-2018 |
| Manufacturer package code | 98ASA01086D |

Table 1. Package summary

| Parameter | Min | Nom | Max | Unit |
|--------------------------------|-----|------|-----|------|
| package length | - | 8 | - | mm |
| package width | - | 8 | - | mm |
| seated height | - | 0.85 | - | mm |
| nominal pitch | - | 0.5 | - | mm |
| actual quantity of termination | - | 56 | - | |



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2 Package outline

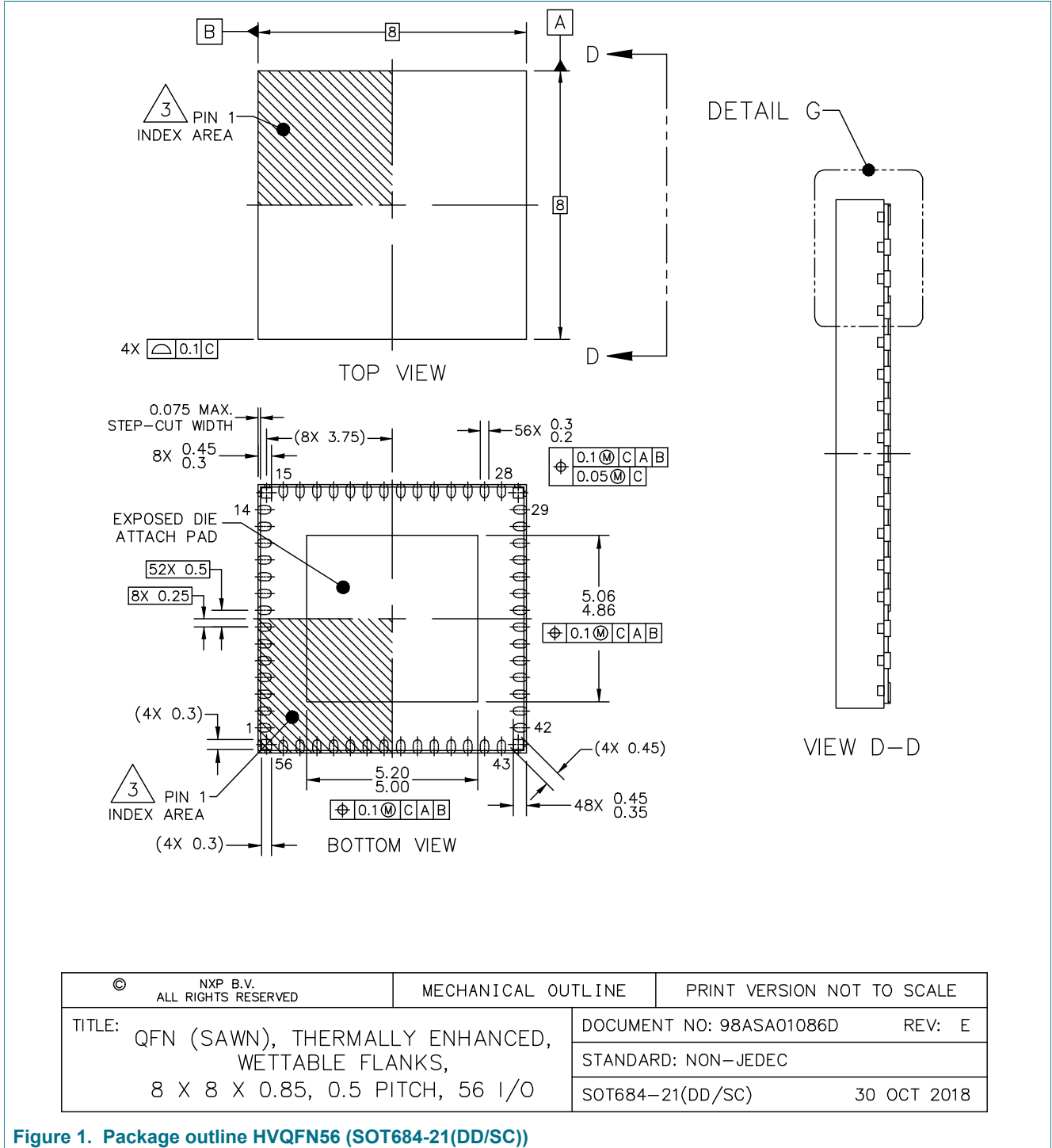
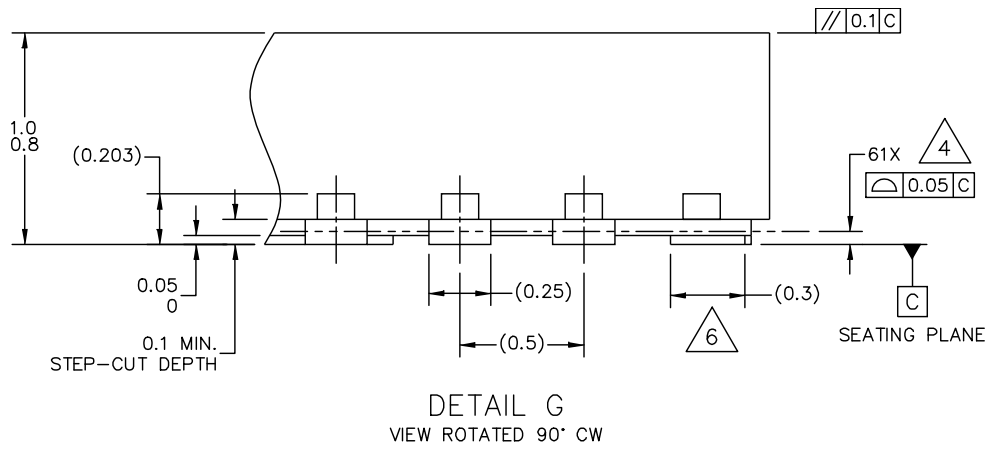


Figure 1. Package outline HVQFN56 (SOT684-21(DD/SC))

HVQFN56, plastic, thermally enhanced very thin quad flat package, no-leads, wettable flanks; 56 terminals; 0.5 mm pitch; 8 mm x 8 mm x 0.85 mm body



| | | | |
|---|--------------------------|----------------------------|-------------|
| © NXP B.V. ALL RIGHTS RESERVED | MECHANICAL OUTLINE | PRINT VERSION NOT TO SCALE | |
| TITLE: QFN (SAWN), THERMALLY ENHANCED, WETTABLE FLANKS, 8 X 8 X 0.85, 0.5 PITCH, 56 I/O | DOCUMENT NO: 98ASA01086D | | REV: E |
| | STANDARD: NON-JEDEC | | |
| | SOT684-21(DD/SC) | | 30 OCT 2018 |

Figure 2. Package outline detail HVQFN56 (SOT684-21(DD/SC))

HVQFN56, plastic, thermally enhanced very thin quad flat package, no-leads, wettable flanks; 56 terminals; 0.5 mm pitch; 8 mm x 8 mm x 0.85 mm body

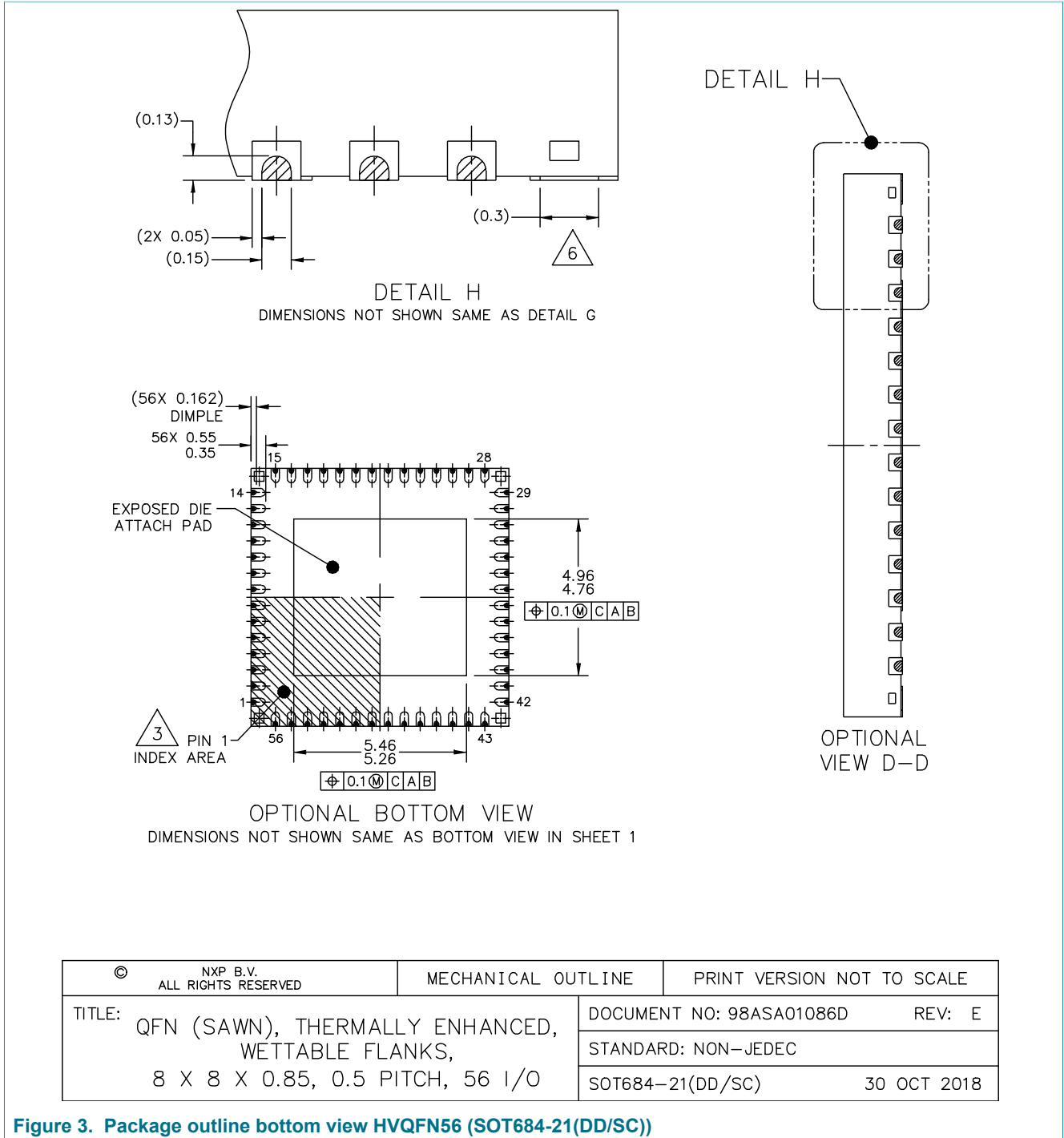


Figure 3. Package outline bottom view HVQFN56 (SOT684-21(DD/SC))

HVQFN56, plastic, thermally enhanced very thin quad flat package, no-leads, wettable flanks; 56 terminals; 0.5 mm pitch; 8 mm x 8 mm x 0.85 mm body

3 Soldering

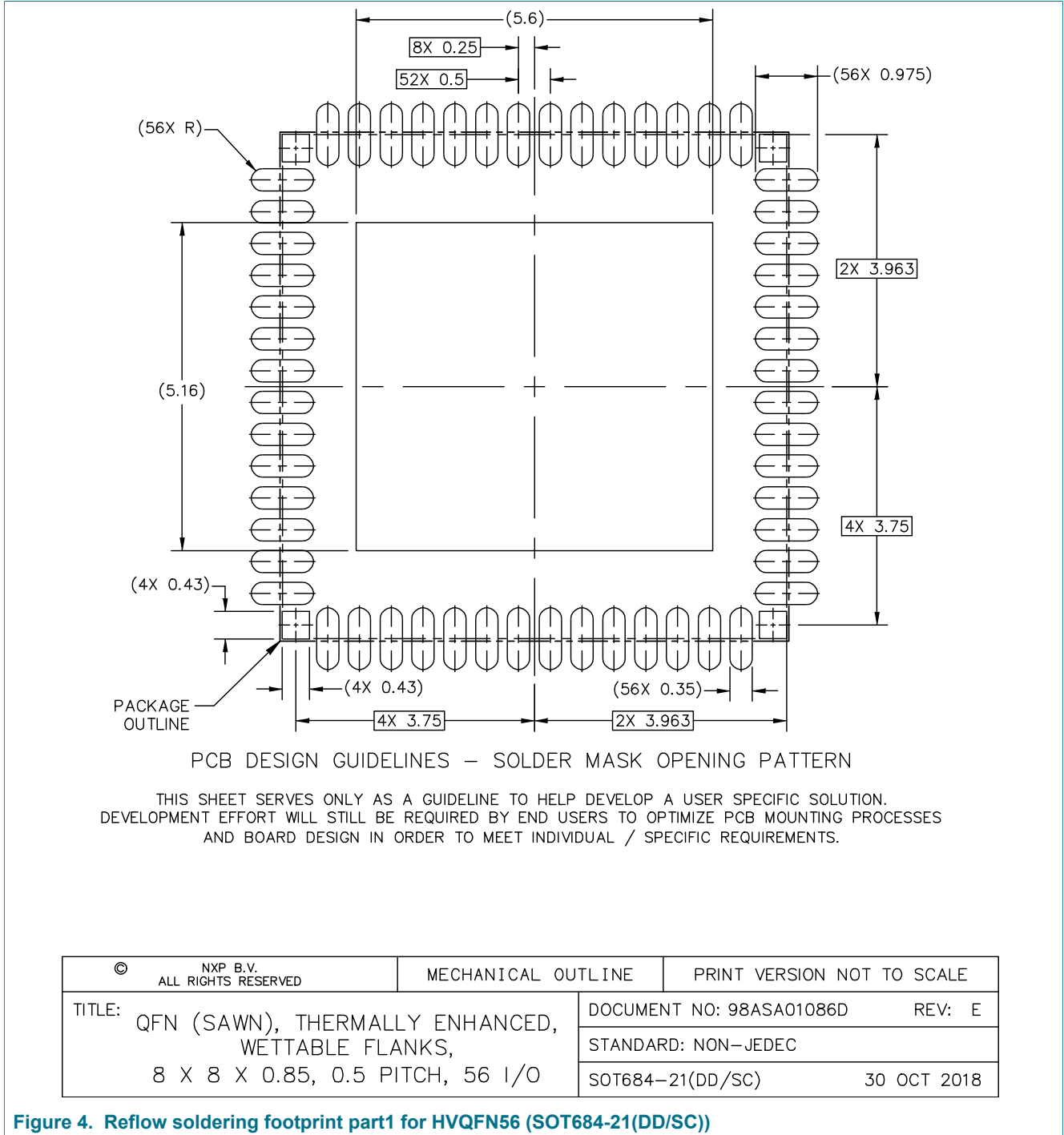


Figure 4. Reflow soldering footprint part1 for HVQFN56 (SOT684-21(DD/SC))

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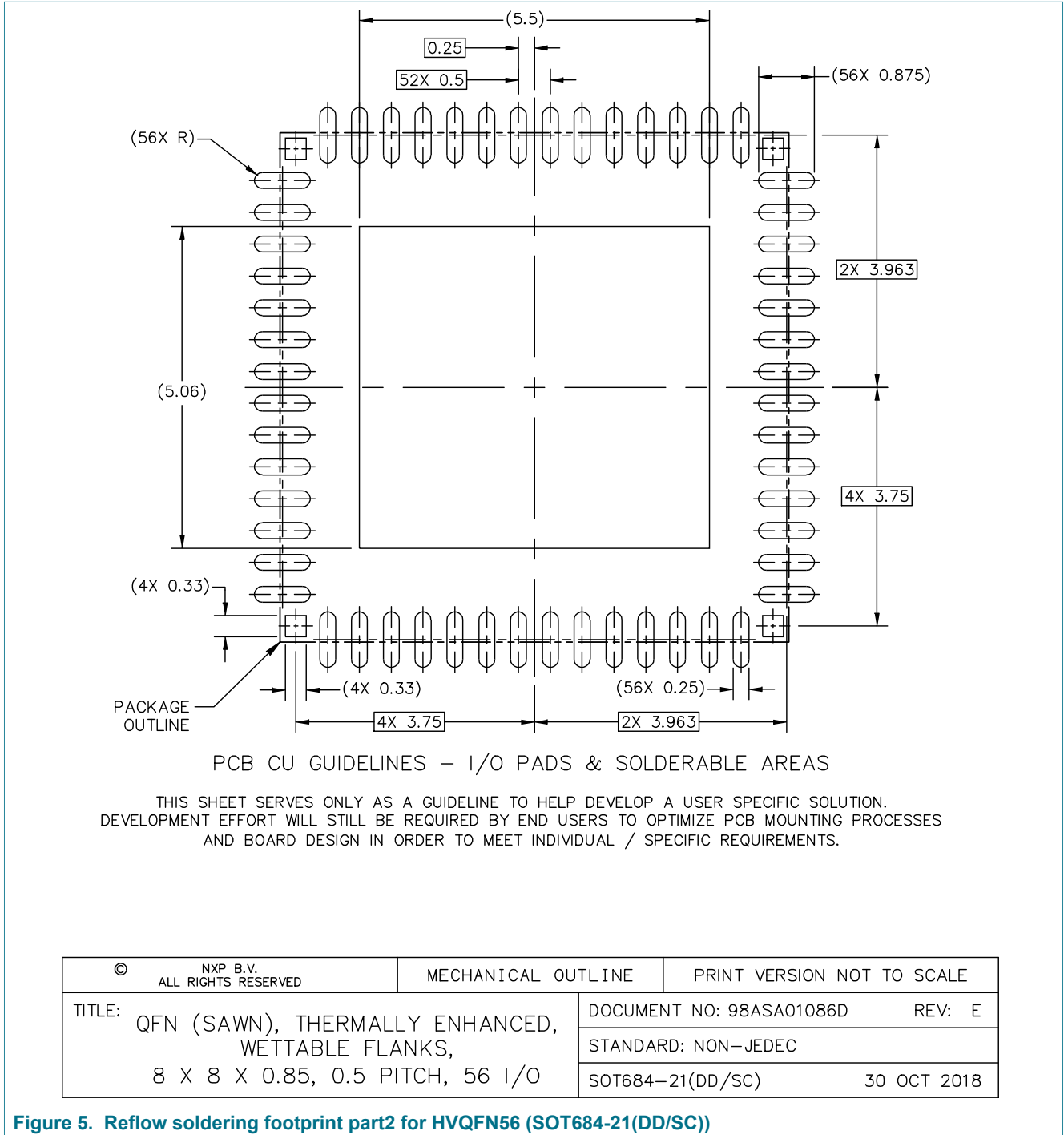
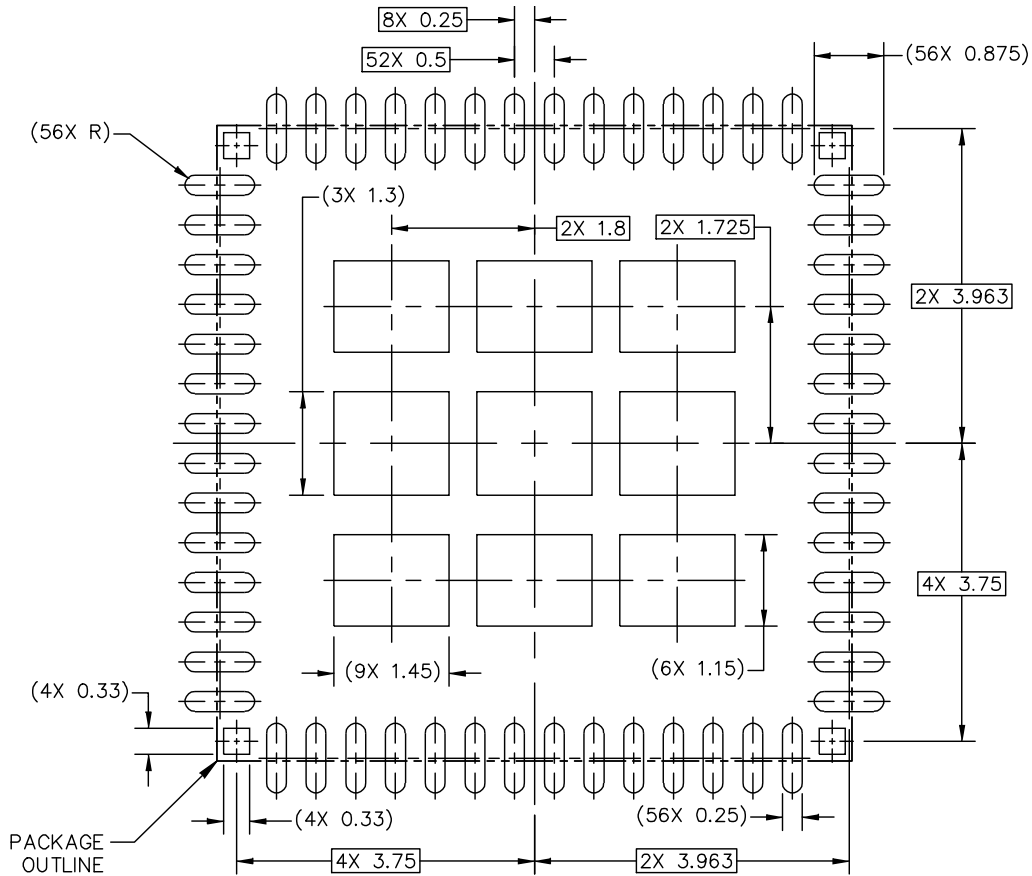


Figure 5. Reflow soldering footprint part2 for HVQFN56 (SOT684-21(DD/SC))

HVQFN56, plastic, thermally enhanced very thin quad flat package, no-leads, wettable flanks; 56 terminals; 0.5 mm pitch; 8 mm x 8 mm x 0.85 mm body



RECOMMENDED STENCIL THICKNESS 0.15 OR 0.125

PCB DESIGN GUIDELINES – SOLDER PASTE STENCIL

THIS SHEET SERVES ONLY AS A GUIDELINE TO HELP DEVELOP A USER SPECIFIC SOLUTION. DEVELOPMENT EFFORT WILL STILL BE REQUIRED BY END USERS TO OPTIMIZE PCB MOUNTING PROCESSES AND BOARD DESIGN IN ORDER TO MEET INDIVIDUAL / SPECIFIC REQUIREMENTS.

| | | | |
|---|--------------------------|----------------------------|--|
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| TITLE: QFN (SAWN), THERMALLY ENHANCED, WETTABLE FLANKS, 8 X 8 X 0.85, 0.5 PITCH, 56 I/O | DOCUMENT NO: 98ASA01086D | REV: E | |
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| | SOT684-21(DD/SC) | 30 OCT 2018 | |

Figure 6. Reflow soldering footprint part3 for HVQFN56 (SOT684-21(DD/SC))

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NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.
3. PIN ONE CONFIGURATION MAY VARY.
4. COPLANARITY APPLIES TO LEADS, DIE ATTACH FLAG AND CORNER NON-FUNCTIONAL PADS.
5. MIN. METAL GAP SHOULD BE 0.25 MM.
6. ANCHORING PADS.

| | | | |
|---|--------------------------|----------------------------|-------------|
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Figure 7. Package outline note HVQFN56 (SOT684-21(DD/SC))

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