







Standardized Information Note (IN)

| 1. Information Note basic data | | |
|--------------------------------|--|---|
| 1.1 Company |  | TDK-Miconas GmbH, Hans-Bunte-Straße 19, D-79108 Freiburg, Germany |
| 1.2 Information Note No. | 17005 | |
| 1.3 Title of IN | HAL Switches HAL 5xy / HAL 240 in TO92UA Additional marking bottom side for non-spread and spread package TO92UA and additional preformed leadframe for spread package TO92UA | |
| 1.4 Issue date | 2017/03/30 | |

| 2. Contact | | |
|------------------------------|----------------------------------|------------------------|
| 2.1 Contact supplier | | |
| 2.1.1 Name | Please contact your distributor. | |
| 2.1.2 Phone | | |
| 2.1.3 Email | | |
| 2.2 Team supplier (optional) | | |
| 2.2.1 Name (optional) | 2.2.2 Phone (optional) | 2.2.3 Email (optional) |
| | | |
| | | |
| | | |



| 3. Description | | |
|----------------|---|--|
| | Old | New |
| Description #1 | <p>Top Side Marking:</p>  <p>Bottom Side Marking:</p>  | <p>Top Side Marking:</p>  No Change! <p>Bottom Side Marking:</p>  OR  |
| Description #2 | <p>Spread Package: Mechanical spreading of the pins. Please refer to the spread package drawing in the corresponding Data Sheet.</p> | <p>Spread Package: Mechanical spreading of the pins or preformed leadframe for the spread package (see attached package drawing "Preformed Spread Leadframe").</p> |
| Description #3 | | |
| Description #4 | | |
| Description #5 | | |

| 4. Reason / motivation | |
|---------------------------------------|--|
| 4.1 Motivation | Quality improvement of the package and enabling better traceability |
| 4.2 Additional explanation (optional) | <p>A new tool in assembly enables cavity marking at the bottom side of our UA-Package. The top side marking and also the package dimension remain unchanged. Mixed deliveries with and without bottom marking might be possible.</p> <p>Mechanical spreading of the pins endangers reduction of Sn-Thickness on the pins. In order to avoid this a preformed leadframe for the spread package will be introduced. Mixed deliveries with mechanical spreading and preformed leadframe for the spread package might be possible.</p> <p>No change in material, fit and function of the package. Also no change in application necessary.</p> |

| 5. Marking of parts / traceability |
|------------------------------------|
|------------------------------------|

| | |
|------------------------|---|
| 5.1 Description | No change of marking. Traceability available via lotnumber. |
|------------------------|---|

| 6. Timing / schedule | |
|---------------------------------------|----------|
| 6.1 Intended start of delivery | 9/1/2017 |

| 7. Attachments (e.g. additional documentation, pictures, part list...) | |
|--|--|
|  Preformed Spread Leadframe HAL50x - HAL 54x.pdf |  Preformed Spread Leadframe HAL55x - HAL 58x.pdf |

| 8. Affected parts | | | | | | | | | |
|-------------------------|--------------------------|------------------------------------|--------------------|-----------------------------------|--|--------------------------|------------------------------------|--------------------|--|
| 8.1 Current | | | | | | 8.2 New (if applicable) | | | |
| 8.1.1 Customer Part No. | 8.1.2 Supplier Part Name | 8.1.3 Supplier Part No. (optional) | 8.1.4 Package Name | 8.1.5 Part Description (optional) | 8.1.6 Additional Part Information (optional) | 8.2.2 Supplier Part Name | 8.2.3 Supplier Part No. (optional) | 8.2.4 Package Name | 8.2.6 Additional Part Information (optional) |
| | HAL 240 | | TO92UA-2 | | | | | | |
| | HAL 501 | | TO92UA-1 | | | | | | |
| | HAL 501 | | TO92UA-2 | | | | | | |
| | HAL 502 | | TO92UA-1 | | | | | | |
| | HAL 502 | | TO92UA-2 | | | | | | |
| | HAL 503 | | TO92UA-1 | | | | | | |
| | HAL 503 | | TO92UA-2 | | | | | | |
| | HAL 504 | | TO92UA-1 | | | | | | |
| | HAL 504 | | TO92UA-2 | | | | | | |
| | HAL 505 | | TO92UA-1 | | | | | | |
| | HAL 505 | | TO92UA-2 | | | | | | |
| | HAL 506 | | TO92UA-1 | | | | | | |
| | HAL 506 | | TO92UA-2 | | | | | | |
| | HAL 507 | | TO92UA-2 | | | | | | |
| | HAL 508 | | TO92UA-1 | | | | | | |
| | HAL 508 | | TO92UA-2 | | | | | | |
| | HAL 509 | | TO92UA-1 | | | | | | |
| | HAL 509 | | TO92UA-2 | | | | | | |
| | HAL 516 | | TO92UA-1 | | | | | | |
| | HAL 516 | | TO92UA-2 | | | | | | |
| | HAL 519 | | TO92UA-1 | | | | | | |
| | HAL 519 | | TO92UA-2 | | | | | | |
| | HAL 523 | | TO92UA-2 | | | | | | |
| | HAL 525 | | TO92UA-2 | | | | | | |

| | | | | | | | | | |
|--|---------|--|----------|--|--|--|--|--|--|
| | HAL 526 | | TO92UA-2 | | | | | | |
| | HAL 542 | | TO92UA-2 | | | | | | |
| | HAL 543 | | TO92UA-2 | | | | | | |
| | HAL 546 | | TO92UA-1 | | | | | | |
| | HAL 546 | | TO92UA-2 | | | | | | |
| | HAL 548 | | TO92UA-2 | | | | | | |
| | HAL 549 | | TO92UA-1 | | | | | | |
| | HAL 549 | | TO92UA-2 | | | | | | |
| | HAL 556 | | TO92UA-1 | | | | | | |
| | HAL 556 | | TO92UA-2 | | | | | | |
| | HAL 566 | | TO92UA-1 | | | | | | |
| | HAL 566 | | TO92UA-2 | | | | | | |
| | HAL 573 | | TO92UA-2 | | | | | | |
| | HAL 574 | | TO92UA-1 | | | | | | |
| | HAL 574 | | TO92UA-2 | | | | | | |
| | HAL 575 | | TO92UA-1 | | | | | | |
| | HAL 575 | | TO92UA-2 | | | | | | |
| | HAL 576 | | TO92UA-1 | | | | | | |
| | HAL 576 | | TO92UA-2 | | | | | | |
| | HAL 579 | | TO92UA-2 | | | | | | |
| | HAL 581 | | TO92UA-1 | | | | | | |
| | HAL 581 | | TO92UA-2 | | | | | | |
| | HAL 584 | | TO92UA-2 | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |