

## Product Advisor (PA)

**Subject:** Datasheet specification change for listed Renesas ICL3221E\*, ICL3222E\*, ICL3223E\*, ICL3232E\*, ICL3241E\*, ICL3243E\* and ISL83386E\* Products

**Publication Date:** 9/26/2018

**Effective Date:** 9/26/2018

### Revision Description:

Initial Release

### Description of Change:

This notice is to inform you that Renesas Electronics America Inc has corrected the datasheets absolute maximum rating for  $R_{IN}$  from +25V to +28V for the ICL3221E\*, ICL3222E\*, ICL3223E\*, ICL3232E\*, ICL3241E\*, ICL3243E\* and ISL83386E\* products listed in Appendix A.

### Reason for Change:

The correction to the datasheet aligns the documentation with the product characteristics. Details regarding the change are contained in Appendix B and C.

### Impact on fit, form, function, quality & reliability:

The change will have no impact on the form, fit, function, quality, reliability and environmental compliance of the devices.

### Product Identification:

Product affected by this change is identifiable via Renesas's internal traceability system.

**Qualification status:** Not Applicable

**Sample availability:** 9/26/2018

**Device material declaration:** Available upon request

*Questions or requests pertaining to this change notice, including additional data or samples, must be sent to Renesas within 30 days of the publication date.*

| For additional information regarding this notice, please contact your regional change coordinator (below) |                                                                    |                                                                   |                                                                          |
|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------------------------|
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# Appendix A :

## Affected Product List

|                 |                    |                    |                    |
|-----------------|--------------------|--------------------|--------------------|
| ICL3221ECAZ     | ICL3222EIVZ-T      | ICL3232ECV-16Z-T   | ICL3241EIVZ-T      |
| ICL3221ECAZ-T   | ICL3222EIVZ-TS2490 | ICL3232ECV-16Z-T7A | ICL3243ECAZ        |
| ICL3221ECAZ-T7A | ICL3223ECAZ        | ICL3232EIAZ        | ICL3243ECAZ-T      |
| ICL3221ECVZ     | ICL3223ECAZ-T      | ICL3232EIAZ-T      | ICL3243ECAZ-TS2568 |
| ICL3221ECVZ-T   | ICL3223ECAZ-TS2490 | ICL3232EIBNZ       | ICL3243ECBZ        |
| ICL3221EIAZ     | ICL3223EIAZ        | ICL3232EIBNZ-T     | ICL3243ECBZ-T      |
| ICL3221EIAZ-T   | ICL3223EIAZ-T      | ICL3232EIBZ        | ICL3243ECVZ        |
| ICL3221EIAZ-T7A | ICL3223EIVZ        | ICL3232EIBZ-T      | ICL3243ECVZ-T      |
| ICL3221EIVZ     | ICL3223EIVZ-T      | ICL3232EIV-16Z     | ICL3243EIAZ        |
| ICL3221EIVZ-T   | ICL3223EIVZ-T7A    | ICL3232EIV-16Z-T   | ICL3243EIAZ-T      |
| ICL3221EIVZ-T7A | ICL3232ECAZ        | ICL3232EIV-16Z-T7A | ICL3243EIVZ        |
| ICL3222ECAZ     | ICL3232ECAZ-T      | ICL3232EIV-20Z     | ICL3243EIVZ-T      |
| ICL3222ECAZ-T   | ICL3232ECAZ-T7A    | ICL3232EIV-20ZT    | ICL3243EIVZ-T7A    |
| ICL3222ECVZ     | ICL3232ECBNZ       | ICL3241ECAZ        | ISL83386EIVZ       |
| ICL3222ECVZ-T   | ICL3232ECBNZ-T     | ICL3241ECAZ-T      | ISL83386EIVZ-T     |
| ICL3222EIAZ     | ICL3232ECBNZ-T7A   | ICL3241ECVZ        |                    |
| ICL3222EIAZ-T   | ICL3232ECBZ        | ICL3241ECVZ-T      |                    |
| ICL3222EIBZ     | ICL3232ECBZ-T      | ICL3241EIAZ        |                    |
| ICL3222EIBZ-T   | ICL3232ECBZ-TS2705 | ICL3241EIAZ-T      |                    |
| ICL3222EIVZ     | ICL3232ECV-16Z     | ICL3241EIVZ        |                    |

Appendix B – ICL322xE\*, ICL323xE\* and ICL324xE\* Datasheet comparison (Existing vs New)

Existing Datasheet (page 12 of 33) : Absolute Maximum Ratings of  $R_{IN}$

| Absolute Maximum Ratings                                                                      |                          |
|-----------------------------------------------------------------------------------------------|--------------------------|
| $V_{CC}$ to GND                                                                               | -0.3V to 6V              |
| $V+$ to GND                                                                                   | -0.3V to 7V              |
| $V-$ to GND                                                                                   | +0.3V to -7V             |
| $V+$ to $V-$                                                                                  | 14V                      |
| Input Voltages                                                                                |                          |
| $T_{IN}$ , $\overline{FORCEOFF}$ , $\overline{FORCEON}$ , $\overline{EN}$ , $\overline{SHDN}$ | -0.3V to 6V              |
| $R_{IN}$                                                                                      | $\pm 25V$                |
| Output Voltages                                                                               |                          |
| $T_{OUT}$                                                                                     | $\pm 13.2V$              |
| $R_{OUT}$ , $\overline{INVALID}$                                                              | -0.3V to $V_{CC} + 0.3V$ |
| Short Circuit Duration                                                                        |                          |
| $T_{OUT}$                                                                                     | Continuous               |
| ESD Rating                                                                                    | See Specification Table  |

New Datasheet (page 12 of 33) : Absolute Maximum Ratings of  $R_{IN}$

| Absolute Maximum Ratings                                                                      |                                                            |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------|
| $V_{CC}$ to GND                                                                               | -0.3V to 6V                                                |
| $V+$ to GND                                                                                   | -0.3V to 7V                                                |
| $V-$ to GND                                                                                   | +0.3V to -7V                                               |
| $V+$ to $V-$                                                                                  | 14V                                                        |
| Input Voltages                                                                                |                                                            |
| $T_{IN}$ , $\overline{FORCEOFF}$ , $\overline{FORCEON}$ , $\overline{EN}$ , $\overline{SHDN}$ | -0.3V to 6V                                                |
| $R_{IN}$                                                                                      | $\pm 28V$                                                  |
| Output Voltages                                                                               |                                                            |
| $T_{OUT}$                                                                                     | $\pm 13.2V$                                                |
| $R_{OUT}$ , $\overline{INVALID}$                                                              | -0.3V to $V_{CC} + 0.3V$                                   |
| Short Circuit Duration                                                                        |                                                            |
| $T_{OUT}$                                                                                     | Continuous                                                 |
| ESD Rating                                                                                    | See <a href="#">"Electrical Specifications" on page 12</a> |

# Appendix C – ISL83386E\* Datasheet comparison (Existing vs New)

## Existing Datasheet (page 4 of 10) : Absolute Maximum Ratings of R<sub>IN</sub>

| Absolute Maximum Ratings         |                                 |
|----------------------------------|---------------------------------|
| V <sub>CC</sub> to Ground        | -0.3V to 6V                     |
| V <sub>L</sub> to Ground         | -0.3V to 7V                     |
| V <sub>+</sub> to Ground         | -0.3V to 7V                     |
| V <sub>-</sub> to Ground         | +0.3V to -7V                    |
| V <sub>+</sub> to V <sub>-</sub> | 14V                             |
| Input Voltages                   |                                 |
| T <sub>IN</sub> , SHDN           | -0.3V to 6V                     |
| R <sub>IN</sub>                  | ±25V                            |
| Output Voltages                  |                                 |
| T <sub>OUT</sub>                 | ±13.2V                          |
| R <sub>OUT</sub>                 | -0.3V to (V <sub>L</sub> +0.3V) |
| Short Circuit Duration           |                                 |
| T <sub>OUT</sub>                 | Continuous                      |
| ESD Rating                       | See Specification Table         |

## New Datasheet (page 4 of 12) : Absolute Maximum Ratings of R<sub>IN</sub>

| Absolute Maximum Ratings         |                                                 |
|----------------------------------|-------------------------------------------------|
| V <sub>CC</sub> to Ground        | -0.3V to 6V                                     |
| V <sub>L</sub> to Ground         | -0.3V to 7V                                     |
| V <sub>+</sub> to Ground         | -0.3V to 7V                                     |
| V <sub>-</sub> to Ground         | +0.3V to -7V                                    |
| V <sub>+</sub> to V <sub>-</sub> | 14V                                             |
| Input Voltages                   |                                                 |
| T <sub>IN</sub> , SHDN           | -0.3V to 6V                                     |
| R <sub>IN</sub>                  | ±28V                                            |
| Output Voltages                  |                                                 |
| T <sub>OUT</sub>                 | ±13.2V                                          |
| R <sub>OUT</sub>                 | -0.3V to (V <sub>L</sub> +0.3V)                 |
| Short Circuit Duration           |                                                 |
| T <sub>OUT</sub>                 | Continuous                                      |
| ESD Rating                       | See <a href="#">"ESD PERFORMANCE" on page 5</a> |