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# **PRODUCT ADVISORY**

## **Data Sheet Specification Change for Intersil Product ISL43231\***

**Refer to:  
PA10108**

**Date: October 29, 2010**

October 29, 2010

To: Our Valued Intersil Customers

Subject: **Data Sheet Specification Change for Intersil Product ISL43231\***

This advisory is to inform you that Intersil has updated the data sheet specification for the listed ISL43231\* products. The changes align the electrical specification tables with the historical test methodology and consist of the following:

- i) The NO or NC OFF Leakage Current, COM OFF Leakage Current, and COM ON Leakage Current parameters were updated to remove the 25°C minimum and maximum limits from the -5V, 12V, 5V and 3.3V Supply tables.
- ii) The Enable Turn-ON Time, Enable Turn-OFF Time, and Address Transition Time parameters were updated to remove the 25°C and FULL temperature maximum limits from the -5V, 12V, 5V and 3.3V Supply tables.
- iii) The Break-Before-Make Time parameter was updated to remove the FULL temperature minimum limits from the -5V, 12V, 5V and 3.3V Supply tables.
- iv) The Latch Setup Time, Latch Hold Time, and Latch Pulse Width parameters were updated to remove the 25°C and FULL temperature minimum limits from the -5V, 12V, 5V and 3.3V Supply tables.
- v) The Charge Injection and All Hostile Crosstalk parameters were updated to remove the 25°C maximum limits from the 5V, 12V, 5V and 3.3V Supply tables.
- vi) The ON Resistance, RON Matching Between Channels, and RON Flatness parameters were updated to remove the 25°C and FULL temperature maximum limits from the 3.3V Supply table.

Modifications to the data sheet specification are complete. The updated data sheet is available on the Intersil web site at <http://www.intersil.com/data/fn/fn6054.pdf>.

Products affected: **ISL43231IRZ ISL43231IRZ-T**

There will be no change in external marking of the packaged parts. Parts affected by this change are identifiable via Intersil's internal traceability system.

Intersil will take all necessary actions to conform to customer requirements and to ensure the continued high quality and reliability of Intersil products being supplied. Customers may expect to continue receiving product processed to the same established conditions and systems used for screening of material supplied today.

If you have concerns with this change notice, Intersil must hear from you promptly. Please contact the nearest Intersil Sales Office or call the Intersil Corporate line at 1-888-468-3774, in the United States, or 1-321-724-7143 outside of the United States.

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PA10108

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## PA10108 – Data Sheet Electrical Specification Changes

| Parameter                                    | Symbol               | Temp | Current Limit |       |            | New Limit |           |     | Units |
|--|----------------------|------|---------------|-------|------------|-----------|-----------|-----|-------|
|  |                      |      | Min           | Typ   | Max        | Min       | Typ       | Max |       |
| <b>Electrical Specifications - 5V Supply</b> |                      |      |               |       |            |           |           |     |       |
| NO or NC OFF Leakage Current                 | INO(OFF) or INC(OFF) | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   | nA    |
| COM OFF Leakage Current                      | ICOM(OFF)            | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   |       |
| COM ON Leakage Current                       | ICOM(ON)             | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   |       |
| Enable Turn-ON Time                          | tON                  | 25°C | -             | 35    | 50         | -         | 35        | -   | nS    |
|  |                      | Full | -             | -     | 60         | -         | <b>45</b> | -   |       |
| Enable Turn-OFF Time                         | tOFF                 | 25°C | -             | 22    | 35         | -         | 22        | -   |       |
|  |                      | Full | -             | -     | 40         | -         | <b>27</b> | -   |       |
| Address Transition Time                      | tTRANS               | 25°C | -             | 43    | 60         | -         | 43        | -   |       |
|  |                      | Full | -             | -     | 70         | -         | <b>53</b> | -   |       |
| Break-Before-Make Time                       | tBBM                 | Full | 2             | 7     | -          | -         | 7         | -   |       |
| Latch Setup Time                             | tS                   | 25°C | 25            | -     | -          | -         | <b>25</b> | -   |       |
|  |                      | Full | 35            | -     | -          | -         | <b>35</b> | -   |       |
| Latch Hold Time                              | tH                   | 25°C | 0             | -     | -          | -         | <b>0</b>  | -   |       |
|  |                      | Full | 0             | -     | -          | -         | <b>0</b>  | -   |       |
| Latch Pulse Width                            | tWPW                 | 25°C | 15            | -     | -          | -         | <b>15</b> | -   |       |
|  |                      | Full | 25            | -     | -          | -         | <b>25</b> | -   |       |
| Charge Injection                             | Q                    | 25°C | -             | 0.3   | <b>1</b>   | -         | 0.3       | -   | pC    |
| All Hostile Crosstalk                        |                      | 25°C | -             | -105  | <b>1.5</b> | -         | -105      | -   | dB    |
| <b>Electrical Specifications 12V Supply</b>  |                      |      |               |       |            |           |           |     |       |
| NO or NC OFF Leakage Current                 | INO(OFF) or INC(OFF) | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   | nA    |
| COM OFF Leakage Current                      | ICOM(OFF)            | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   |       |
| COM ON Leakage Current                       | ICOM(ON)             | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002     | -   |       |
| Enable Turn-ON Time                          | tON                  | 25°C | -             | 24    | 40         | -         | 24        | -   | nS    |
|  |                      | Full | -             | -     | 45         | -         | <b>29</b> | -   |       |
| Enable Turn-OFF Time                         | tOFF                 | 25°C | -             | 15    | 30         | -         | 15        | -   |       |
|  |                      | Full | -             | -     | 35         | -         | <b>20</b> | -   |       |
| Address Transition Time                      | tTRANS               | 25°C | -             | 27    | 50         | -         | 27        | -   |       |
|  |                      | Full | -             | -     | 55         | -         | <b>32</b> | -   |       |
| Break-Before-Make Time                       | tBBM                 | Full | 2             | 5     | -          | -         | 5         | -   |       |
| Latch Setup Time                             | tS                   | 25°C | 25            | -     | -          | -         | <b>25</b> | -   |       |
|  |                      | Full | 35            | -     | -          | -         | <b>35</b> | -   |       |
| Latch Hold Time                              | tH                   | 25°C | 0             | -     | -          | -         | <b>0</b>  | -   |       |
|  |                      | Full | 0             | -     | -          | -         | <b>0</b>  | -   |       |
| Latch Pulse Width                            | tWPW                 | 25°C | 15            | -     | -          | -         | <b>15</b> | -   |       |
|  |                      | Full | 25            | -     | -          | -         | <b>25</b> | -   |       |
| Charge Injection                             | Q                    | 25°C | -             | 2.7   | <b>5</b>   | -         | 2.7       | -   | pC    |
| All Hostile Crosstalk                        |                      | 25°C | -             | -105  | <b>1.5</b> | -         | -105      | -   | dB    |

## PA10108 – Data Sheet Electrical Specification Changes -cont.

| Parameter                                    | Symbol               | Temp | Current Limit |       |            | New Limit |            |     | Units |    |
|--|----------------------|------|---------------|-------|------------|-----------|------------|-----|-------|----|
|  |                      |      | Min           | Typ   | Max        | Min       | Typ        | Max |       |    |
| <b>Electrical Specifications 5V Supply</b>   |                      |      |               |       |            |           |            |     |       |    |
| NO or NC OFF Leakage Current                 | INO(OFF) or INC(OFF) | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   | nA    |    |
| COM OFF Leakage Current                      | ICOM(OFF)            | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   |       |    |
| COM ON Leakage Current                       | ICOM(ON)             | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   |       |    |
| Enable Turn-ON Time                          | tON                  | 25°C | -             | 43    | 60         | -         | 43         | -   | nS    |    |
|  |                      | Full | -             | -     | 70         | -         | <b>53</b>  | -   |       |    |
| Enable Turn-OFF Time                         | tOFF                 | 25°C | -             | 20    | 35         | -         | 20         | -   |       |    |
|  |                      | Full | -             | -     | 40         | -         | <b>25</b>  | -   |       |    |
| Address Transition Time                      | tTRANS               | 25°C | -             | 51    | 70         | -         | 51         | -   |       |    |
|  |                      | Full | -             | -     | 85         | -         | <b>56</b>  | -   |       |    |
| Break-Before-Make Time                       | tBBM                 | Full | 2             | 9     | -          | -         | 9          | -   |       |    |
| Latch Setup Time                             | tS                   | 25°C | 25            | -     | -          | -         | <b>25</b>  | -   |       |    |
|  |                      | Full | 35            | -     | -          | -         | <b>35</b>  | -   |       |    |
| Latch Hold Time                              | tH                   | 25°C | 0             | -     | -          | -         | <b>0</b>   | -   |       |    |
|  |                      | Full | 0             | -     | -          | -         | <b>0</b>   | -   |       |    |
| Latch Pulse Width                            | tWPW                 | 25°C | 15            | -     | -          | -         | <b>15</b>  | -   |       |    |
|  |                      | Full | 25            | -     | -          | -         | <b>25</b>  | -   |       |    |
| Charge Injection                             | Q                    | 25°C | -             | 0.6   | <b>1.5</b> | -         | 0.6        | -   | pC    |    |
| All Hostile Crosstalk                        |                      | 25°C | -             | -105  | <b>1.5</b> | -         | -105       | -   | dB    |    |
| <b>Electrical Specifications 3.3V Supply</b> |                      |      |               |       |            |           |            |     |       |    |
| ON-Resistance                                | RON                  | 25°C | -             | 135   | 155        | -         | 135        | -   | Ω     |    |
|  |                      | Full | -             | -     | 200        | -         | <b>155</b> | -   |       |    |
| RON Matching Between Channels                | ΔRON                 | 25°C | -             | 3.4   | 8          | -         | 3.4        | -   |       |    |
|  |                      | Full | -             | -     | 10         | -         | <b>5.4</b> | -   |       |    |
| RON Flatness                                 | RFLAT(ON)            | 25°C | -             | 34    | 40         | -         | 34         | -   |       |    |
|  |                      | Full | -             | -     | 50         | -         | <b>44</b>  | -   |       |    |
| NO or NC OFF Leakage Current                 | INO(OFF) or INC(OFF) | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   |       | nA |
| COM OFF Leakage Current                      | ICOM(OFF)            | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   |       |    |
| COM ON Leakage Current                       | ICOM(ON)             | 25°C | -0.1          | 0.002 | 0.1        | -         | 0.002      | -   |       |    |
| Enable Turn-ON Time                          | tON                  | 25°C | -             | 82    | 100        | -         | 82         | -   |       | nS |
|  |                      | Full | -             | -     | 120        | -         | <b>102</b> | -   |       |    |
| Enable Turn-OFF Time                         | tOFF                 | 25°C | -             | 37    | 50         | -         | 37         | -   |       |    |
|  |                      | Full | -             | -     | 60         | -         | <b>47</b>  | -   |       |    |
| Address Transition Time                      | tTRANS               | 25°C | -             | 96    | 120        | -         | 96         | -   |       |    |
|  |                      | Full | -             | -     | 145        | -         | <b>121</b> | -   |       |    |
| Break-Before-Make Time                       | tBBM                 | Full | 3             | 13    | -          | -         | 13         | -   |       |    |
| Latch Setup Time                             | tS                   | 25°C | 50            | -     | -          | -         | <b>50</b>  | -   |       |    |
|  |                      | Full | 60            | -     | -          | -         | <b>60</b>  | -   |       |    |
| Latch Hold Time                              | tH                   | 25°C | 0             | -     | -          | -         | <b>0</b>   | -   |       |    |
|  |                      | Full | 0             | -     | -          | -         | <b>0</b>   | -   |       |    |
| Latch Pulse Width                            | tWPW                 | 25°C | 30            | -     | -          | -         | <b>30</b>  | -   |       |    |
|  |                      | Full | 40            | -     | -          | -         | <b>40</b>  | -   |       |    |
| Charge Injection                             | Q                    | 25°C | -             | 0.3   | <b>1</b>   | -         | 0.3        | -   | pC    |    |
| All Hostile Crosstalk                        |                      | 25°C | -             | -105  | <b>1.5</b> | -         | -105       | -   | dB    |    |