ON Semiconductor®

Product Bulletin

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Title of Change:	KAE-04471 Datasheet Updates
Effective date:	8 January 2018
Contact information:	Contact your local ON Semiconductor Sales Office or <John.Frenett@onsemi.com>
Type of notification:	This Product Bulletin is for notification purposes only. ON Semiconductor will proceed with implementation of this change upon publication of this Product Bulletin.
Change category:	☐ Wafer Fab Change ☐ Assembly Change ☐ Test Change ☒ Other: Datasheet

Change Sub-Category(s):

☐ Manufacturing Site Change/Addition
☐ Manufacturing Process Change
☐ Material Change
☐ Product specific change
☒ Datasheet/Product Doc change
☐ Shipping/Packaging/Marking
☐ Other: _____

Sites Affected:	ON Semiconductor Sites: ON Rochester, New York	External Foundry/Subcon Sites: None

Description and Purpose:

This Product Bulletin announces the following changes

1) A number of pins in Table 3 (PIN DESCRIPTION) were mapped to incorrect labels and descriptions due to an incomplete edit of a preliminary revision. The correct mapping is as follows:

Pin Number	Label	Description
B19	RG23b	Amplifier 2 and 3 reset, quadrant b
A18	H2Lb	HCCD last gate, outputs 1,2 and 3, quadrant b
C19	H2SW2b	HCCD output 2 selector, quadrant b
C18	H2SW3b	HCCD output 3 selector, quadrant b
B18	GND	Ground
A19	VOUT2b	Video output 2, quadrant b
F24	V2B	VCCD bottom phase 2
F23	ESD	
D21	V1T	VCCD top phase 1
D22	V2T	VCCD top phase 2
D23	V3T	VCCD top phase 3
E23	V4T	VCCD top phase 4
E4	GND	Ground
F21	VOUT1d	Amplifier 1 output, quadrant d
F22	VDD1d	Amplifier 1 supply, quadrant d
F6	VDD2c	Amplifier 2 supply, quadrant c
F7	VOUT2c	Video output 2, quadrant c
E18	GND	Ground
D8	H2SW3c	HCCD output 3 selector, quadrant c
D7	H2SW2c	HCCD output 2 selector, quadrant c
F8	H2Lc	HCCD last gate, outputs 1,2 and 3, quadrant c
E7	RG23c	Amplifier 2 and 3 reset, quadrant c

2) Explicit reference is now provided for no-connect pins in Table 3 (PIN DESCRIPTION).

Pin Number	Label	Description
E1	N/C	No connect
F1	N/C	No connect
D2	N/C	No connect
D1	N/C	No connect
C24	N/C	No connect
A26	N/C	No connect
B26	N/C	No connect
C26	N/C	No connect
D26	N/C	No connect
E26	N/C	No connect
F26	N/C	No connect

3) Updated Table 3 (PIN DESCRIPTION) with missing row.

Pin Number	Label	Description
F3	ESD	

4) Added Figure 4 (Monochrome and Color Quantum Efficiency).
5) Added Figure 5 (Angled Response for Monochrome Device).
6) Added Figure 6 (Vertical Angled Response for Color Device).
7) Added Figure 7 (Horizontal Angled Response for Color Device).
8) Added Figure 8 (Frame Rates vs. Clock Frequency).
9) Table 9 (DC BIAS OPERATING CONDITIONS): The second of two original notes has been rewritten; a third note has been added.
10) Table 12 (ELECTRONIC SHUTTER PULSE): All rows have been eliminated, save for one. The single remaining row, dedicated to pin SUB, presents new values for **Low** and **High** electronic shutter voltages.
11) Table 13, previously labelled DC BIAS OPERATING CONDITIONS, is now labelled DEVICE IDENTIFICATION.
12) Relabeled Figure 33 (Completed Assembly 1).
13) Relabeled Figure 34 (Completed Assembly 2).
14) Relabeled Figure 35 (Completed Assembly 3).
15) The Table 7 (ABSOLUTE MAXIMUM RATINGS) value for Operating Temperature Minimum has been corrected to read -30 deg C (had been -70 deg C).
16) In Table 13 (DEVICE IDENTIFICATION VALUES), item Device Identification's MIN, NOM, and MAX have been corrected to 63,000 (was 8,000), 70,000 (was 10,000), and 84,000 (was 12,000), respectively.

List of Affected Standard Parts:

KAE-04471-ABA-JP-FA
KAE-04471-ABA-JP-EE
KAE-04471-FBA-JP-FA
KAE-04471-FBA-JP-EE
KAE-04471-ABA-SP-FA
KAE-04471-ABA-SP-EE
KAE-04471-ABA-SD-FA
KAE-04471-ABA-SD-EE
KAE-04471-FBA-SP-FA
KAE-04471-FBA-SP-EE
KAE-04471-FBA-SD-FA
KAE-04471-FBA-SD-EE