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# **PRODUCT ADVISORY**

**Data Sheet Specification  
Change for Intersil Products  
ISL97682\*, ISL97683\*, and  
ISL97684\***

**Refer to:  
PA12037**

**Date: May 17, 2012**

May 17, 2012

To: Our Valued Intersil Customer

Subject: **Data Sheet Specification Change for Intersil Products ISL97682\*, ISL97683\*, and ISL97684\***

This advisory is to inform you that Intersil has changed the data sheet specification for the listed ISL97682\*, ISL97683\*, and ISL97684\* products. The updates specify the resistor and capacitor values for the COMP pin in the *Figure 1 - Typical Application Diagrams* and change the FSW (Switching Frequency) voltage levels in the *Pin Descriptions* table and *Switching Frequency and PWM/PFM Mode* section of the data sheet. Details regarding the changes are contained on the following pages. The updated data sheet is available on the Intersil web site at <http://www.intersil.com/content/dam/Intersil/documents/fn76/fn7689.pdf>.

Products affected:

ISL97682IRTZ	ISL97682IRTZ-TS2378	ISL97683IRTZ-TK
ISL97682IRTZ-T	ISL97682IRTZR5509	ISL97684IRTZ
ISL97682IRTZ-TK	ISL97683IRTZ	ISL97684IRTZ-T
ISL97682IRTZ-TR5509	ISL97683IRTZ-T	ISL97684IRTZ-TK

There have been no changes made to the die/silicon or device itself. There will be no change in external marking of the packaged parts.

Intersil will take all necessary actions to conform to agreed upon 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 manufacturing of material supplied today.

If you have concerns with this advisory, 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.

Regards,



Jon Brewster  
Intersil Corporation

PA12037

CC: J. Touvell C. Chiraphanda R. Monteiro

# PA12037 - Data Sheet Updates

- Figure 1 - Typical Application Diagrams (Page 1):

Change From:

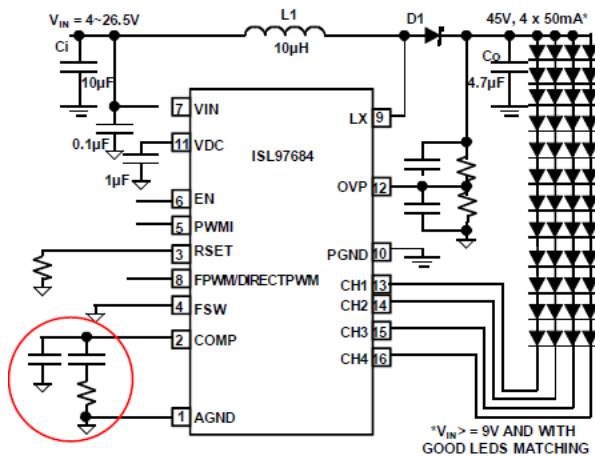


FIGURE 1A. DIRECT PWM DIMMING

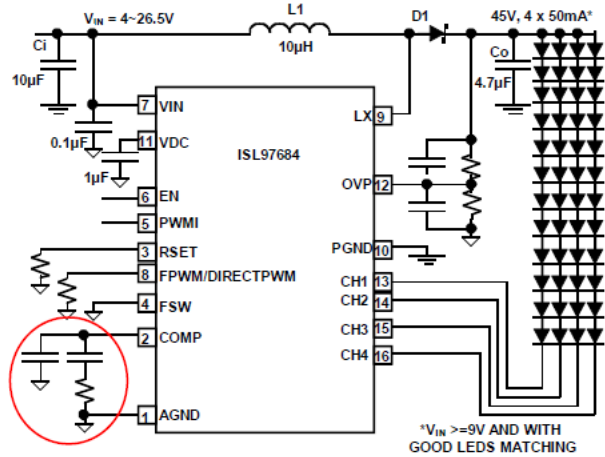


FIGURE 1B. PWM DIMMING WITH DIMMING FREQUENCY ADJUSTMENT USING  $R_{FPWM}$

FIGURE 1. ISL97684 TYPICAL APPLICATION DIAGRAMS

Change To:

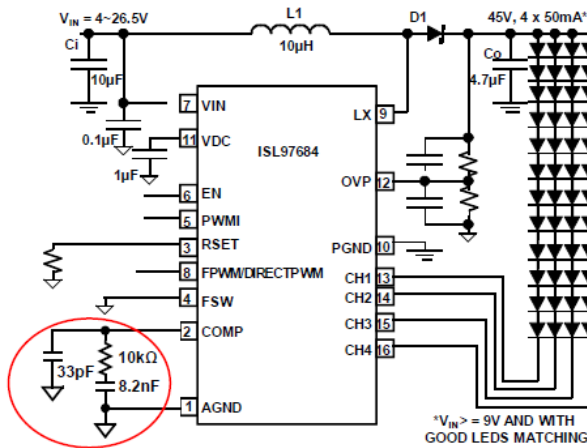


FIGURE 1A. DIRECT PWM DIMMING

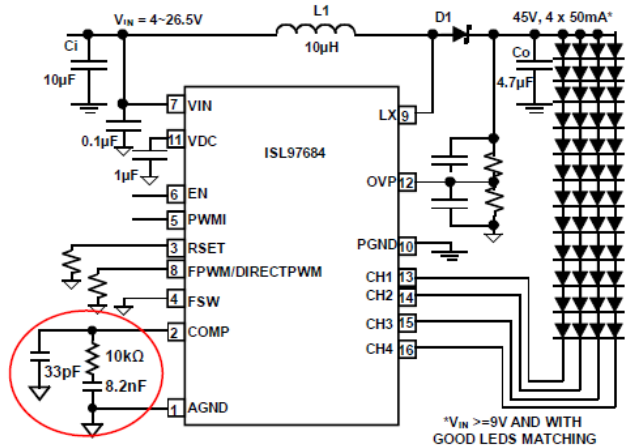


FIGURE 1B. PWM DIMMING WITH DIMMING FREQUENCY ADJUSTMENT USING  $R_{FPWM}$

FIGURE 1. ISL97684 TYPICAL APPLICATION DIAGRAMS

## PA12037 – Data Sheet Updates – cont.

- Pin Descriptions (Page 4):

### Change From:

4	FSW	FSW	FSW	<p>FSW = <math>0 \sim 0.25 * VDC</math>, Boost Switching Frequency = 600kHz with phase shift and PFM mode enabled.</p> <p>FSW = <math>0.25 * VDC \sim 0.5 * VDC</math>, Boost Switching Frequency = 600kHz with phase shift and PWM mode enabled.</p> <p>FSW = <math>0.5 * VDC \sim 0.75 * VDC</math>, Boost Switching Frequency = 1MHz with phase shift and PWM mode enabled.</p> <p>FSW = <math>0.75 * VDC \sim VDC</math>, Boost Switching Frequency = 1MHz with phase shift and PFM mode enabled.</p>
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### Change To:

4	FSW	FSW	FSW	<p>FSW = <math>0 \sim 0.11 * VDC</math>, Boost Switching Frequency = 600kHz with phase shift and PFM mode enabled.</p> <p>FSW = <math>0.34 * VDC \sim 0.44 * VDC</math>, Boost Switching Frequency = 600kHz with phase shift and PWM mode enabled.</p> <p>FSW = <math>0.53 * VDC \sim 0.63 * VDC</math>, Boost Switching Frequency = 1MHz with phase shift and PWM mode enabled.</p> <p>FSW = <math>0.86 * VDC \sim VDC</math>, Boost Switching Frequency = 1MHz with phase shift and PFM mode enabled.</p>
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- Switching frequency and PWM/PFM Mode – Table 2 (Page 12):

### Change From:

**TABLE 2.**

FSW	F <sub>SW</sub>	PHASE SHIFT	Mode	R <sub>UPPER</sub>	R <sub>LOWER</sub>
$(0 \sim 0.25) * VDC$	600kHz	Yes	PFM	Open	0
$(0.25 \sim 0.5) * VDC$	600kHz	Yes	PWM	156kΩ	100kΩ
$(0.5 \sim 0.75) * VDC$	1.0MHz	Yes	PWM	100kΩ	122kΩ
$(0.75 \sim 1) VDC$	1.0MHz	Yes	PFM	0	Open

### Change To:

**TABLE 2.**

FSW	F <sub>SW</sub>	PHASE SHIFT	Mode	R <sub>UPPER</sub>	R <sub>LOWER</sub>
$(0 \sim 0.11) * VDC$	600kHz	Yes	PFM	Open	0
$(0.34 \sim 0.44) * VDC$	600kHz	Yes	PWM	187kΩ	120kΩ
$(0.53 \sim 0.63) * VDC$	1.0MHz	Yes	PWM	100kΩ	138kΩ
$(0.86 \sim 1) VDC$	1.0MHz	Yes	PFM	0	Open