

February 17, 2020

**Subject: Product Termination Notification *MLX91210KDC-CAS-xyz* and *MLX91210KDF-CAS-xyz* with “xyz” alphanumeric characters designating differences in factory calibration.**

Dear

We regret having to inform you that Melexis intends to stop production of above-mentioned product due to the sudden and unforeseen discontinuation of our assembly house offering this custom package.

There is a next-generation replacement device available which has not officially been launched yet on the market but has been in production with selected customers for over 2 years. This product is called MLX91220 and is offered in the same packages (DC = SOIC8, DF = SOIC16 wide body) as the discontinued MLX91210. A preliminary datasheet is provided along with this communication. The product is due to be launched officially end of Q2/2020.

To prepare a ramp-down scenario, Melexis will still accept limited orders of MLX91210KDC-CAS-xyz and MLX91210KDF-CAS-xyz till **06-Mar-2020** as a function of the limited remaining capacity. By then we expect a final all-time buy order for delivery until **30-Apr-2020**. This order will be non-cancelable and non-returnable. We strongly urge you not to over-forecast in order to facilitate the allocation process. The current unit price, payment terms and shipment terms remain applicable.

We understand that this transition period is not long, but strengthen ourselves with the fact that the MLX91220 cross-references exist (**Annex#1**), and with pin compatibility between MLX91210 functional pins and MLX91220 it should have minor to no hardware implications in your existing application. More information about the differences can be found in **Annex#2** of this letter.

Regarding the storage of the products received by Melexis we refer to the [shelf life confirmation letter](#) published on our website. We are committed to find a good solution for business continuity.

For logistical follow-up and assistance with your orders, please get in touch with your main contact at Melexis, Cathy De Ron. In case of technical questions, please contact the undersigned.

Sincerely,

**Bruno Boury**

Product Line Manager  
Current Sensors

## Annex #1 – Cross-references

SOIC8 package (DC)	Cross-Reference	Status
MLX91210KDC-CAS-101	MLX91220KDC-ABR-025 (ratiometric)	Under release
	MLX91220KDC-ABF-025 (non-ratiometric)	Available
MLX91210KDC-CAS-102	MLX91220KDC-ABR-050 (ratiometric)	Available
	MLX91220KDC-ABF-050 (non-ratiometric)	Available
MLX91210KDC-CAS-104	N/A	On demand
MLX91210KDC-CAS-105	MLX91220KDC-ABR-030	Available
MLX91210KDC-CAS-106	N/A	On demand

SOIC16 package (DF)	Cross-Reference	Status
MLX91210KDF-CAS-101	MLX91220KDF-ABR-025 (ratiometric)	Under release
	MLX91220KDF-ABF-025 (non-ratiometric)	Available
MLX91210KDF-CAS-102	MLX91220KDF-ABR-050 (ratiometric)	Under release
	MLX91220KDF-ABF-050 (non-ratiometric)	Available
MLX91210KDF-CAS-103	N/A	On demand
	MLX91220KDF-ABF-075 (non-ratiometric)	Available
MLX91210KDF-CAS-104	N/A	On demand

## Annex #2 – Product Pinout Differences

Pinout SOIC8	MLX91210	MLX91220
Pin #1		IP+
Pin #2		IP+
Pin #3		IP-
Pin #4		IP-
Pin #5		[Ground] $V_{SS}$
Pin #6	[Test] TEST	[Reference] $V_{REF}$
Pin #7		[Output] $V_{OUT}$
Pin #8		[Supply] $V_{DD}$

The reference pin on MLX91220 is used in case of non-ratiometric versions, and serves the purpose of being the pin the output voltage is referred to. By definition,  $V_{OUT}$  pin is equal to  $V_{REF}$  pin when no current is floating through the primary conductor. The test pin was recommended to be grounded on the MLX91210 but could also be left floating. For MLX91220 compatibility of existing PCB designs – in case the  $V_{REF}$  pin will not be used, it cannot be left pulled to ground as this will disturb the  $V_{OUT}$  signal. In case the  $V_{REF}$  pin will be used, such as in fixed (non-ratiometric) mode, then it is a sensor output line and should be connected to the ADC reference on the board.

Pinout SOIC16	MLX91210	MLX91220
Pin #1		IP+
Pin #2		IP+
Pin #3		IP+
Pin #4		IP+
Pin #5		IP-
Pin #6		IP-
Pin #7		IP-
Pin #8		IP-
Pin #9	[Ground] $V_{SS}$	
Pin #10	[Test] TEST	[Reference] $V_{REF}$
Pin #11	NC (Not Connected)	
Pin #12	[Output] $V_{OUT}$	
Pin #13	NC (Not Connected)	$OCD_{EXT}$
Pin #14	[Supply] $V_{DD}$	
Pin #15	NC (Not Connected)	$VOC_{EXT}$
Pin #16	NC (Not Connected)	$OCD_{INT}$

The reference pin explanation from the SOIC8 table is also applicable to the SOIC16.

The  $OCD_{EXT}$  and  $OCD_{INT}$  are open drain outputs. In case these overcurrent detection outputs are not used, the existing MLX91210 board design can be left unchanged: either floating or grounded (as recommended).

The  $VOC_{EXT}$  pin defines the external overcurrent detection threshold. It can be left grounded (recommended) or floating in case this overcurrent detection function is not used, again allowing existing board design to be maintained.