



Life Energy Motion

## Product Change Notification

**PCN-038\_2018\_4-OMTB1815201**

**PCBA redesign + manufacturing process change +  
packaging change + marking change**

**HAS series**

**Additional date codes for PCBA redesign and first  
date code for process automation (see on pages 2  
and 4)**

Based on the JEDEC JESD46 standard (latest release)

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Dear customer,

To answer to continuous market requirement for improved performances, and in a permanent effort to improve the quality of its products, LEM intends to proceed to some modification on **HAS series**.

This letter is to notify you about our planned procedure to handle this change.

### Concerned products:

(please note some of these models are part of an obsolescence process and could not be produced anymore before these changes will happen)

**HAS 100-P; HAS 200-P; HAS 300-P; HAS 400-P; HAS 50-P; HAS 500-P; HAS 600-P;**

**HAS 100-S; HAS 100-S/SP16; HAS 100-S/SP31; HAS 100-S/SP50; HAS 100-S/SP54;**

**HAS 125-S/SP16;**

**HAS 150-S; HAS 150-S/SP31; HAS 150-S/SP54;**

**HAS 200-S; HAS 200-S/SP16; HAS 200-S/SP31;**

**HAS 200-S/SP50; HAS 200-S/SP52; HAS 200-S/SP54; HAS 200-S/SP58;**





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HAS 200-S/SP105;  
HAS 300-S; HAS 300-S/SP50; HAS 300-S/SP52; HAS 300-S/SP54;  
HAS 300-S/SP105;  
HAS 400-S; HAS 400-S/SP50; HAS 400-S/SP54; HAS 400-S/SP55;  
HAS 50-S; HAS 50-S/SP16; HAS 50-S/SP50;  
HAS 50-S/SP105;  
HAS 500-S; HAS 500-S/SP16; HAS 500-S/SP50; HAS 500-S/SP56; HAS 500-S/SP57; HAS 500-S/SP105;  
HAS 600-S; HAS 600-S/SP50; HAS 600-S/SP54;  
HAS 600-S/SP105;  
HAS 75-S/SP16; HAS 75-S/SP54;

**Changes:**

➤ ***Description of the technical changes:***

- 1- PCBA redesign. Remove the 2 potentiometers by laser trimmed resistors. PCBA layout change.**

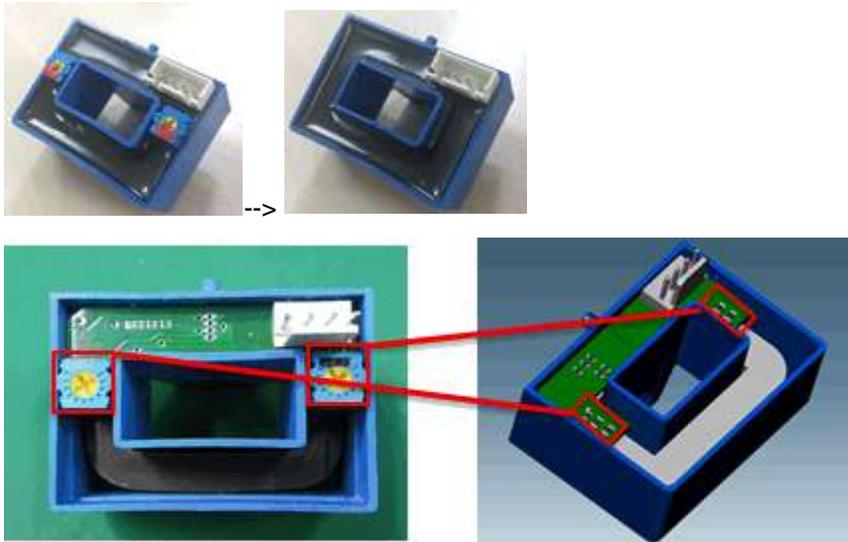
we confirm you that LEM is now producing some of the models listed here above according to the **change 1 – PCBA redesign** and since the **following date codes:**

- ➔ HAS 200-S: date code 719136
- ➔ HAS 200-S/SP50: date code 719172
- ➔ HAS 200-S/SP31: date code 719182
- ➔ HAS 100-S: date code 719250 (07 September 2019)
- ➔ HAS 200-S/SP16: date code 719279 (06 October 2019)
- ➔ HAS 200-P: date code 719292 (19 October 2019)
- ➔ HAS 100-P: date code 719293 (20 October 2019)



Explanation on the date code (example with the model HAS 200-S):

- “7” means the production center, here LEM Electronics (China) Co., Ltd.
- “19” means the year of the production, here the year 2019
- “136” means the day of the production, here the 136<sup>th</sup> day of the year 2019 (16<sup>th</sup> May 2019)



Materials stay the same as before.





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**2- Automation of the manufacturing process of the production line:**

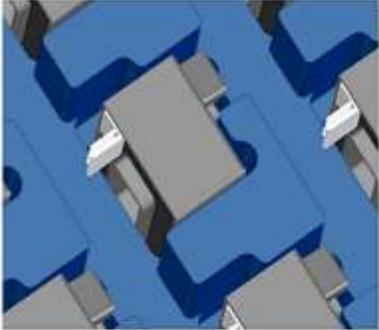
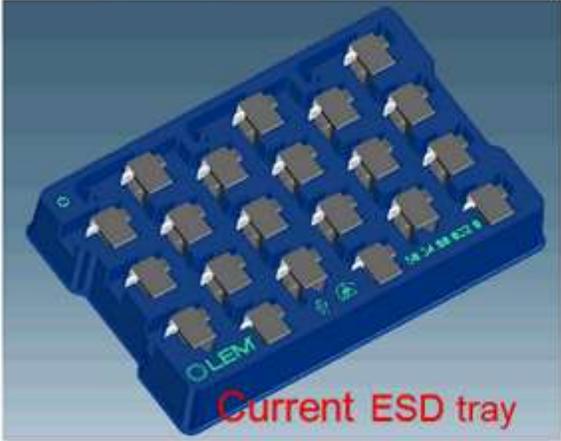
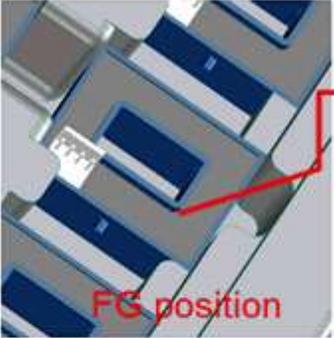
- Automatic soldering Hall chip.
- Automatic PCBA cut from the main board.
- semi-automatic core/PCBA/case assembly.
- laser trimming for calibration.
- final tester including: final test, laser marking and packaging in ESD tray.
- conveyers between machines, automatic pick and place system for equipment loading and unloading.

we confirm you that LEM is now producing some of the models listed here above according to the **change 2 – Automation of the manufacturing process of the production line, and since the date code 719136.**



### 3- ESD packaging tray change

→ reminder date code 719109 (19<sup>th</sup> April 2019)

Current	New design
  <p data-bbox="467 1375 771 1417">Current ESD tray</p>	  <p data-bbox="1250 1375 1502 1417">New ESD tray</p>
<p>21pcs/Tray and 84pcs/Carton box,</p>	<p>21pcs/Tray and 84pcs/Carton box, Will keep the same carton box</p>



#### 4- Marking change – adding UL marking + increasing CE marking

→ reminder date code 719088 (29<sup>th</sup> March 2019)

#### ONLY for the following models:

HAS 100-P; HAS 200-P; HAS 300-P; HAS 400-P; HAS 50-P; HAS 500-P; HAS 600-P;

HAS 100-S/SP16; HAS 100-S/SP50 ; HAS 100-S/SP54;

HAS 125-S/SP16 ;

HAS 150-S/SP54;

HAS 200-S/SP16; HAS 200-S/SP50 ; HAS 200-S/SP52; HAS 200-S/SP54;

HAS 300-S/SP50 ; HAS 300-S/SP52; HAS 300-S/SP54;

HAS 400-S/SP50 ; HAS 400-S/SP54;

HAS 50-S/SP16 ; HAS 50-S/SP50;

HAS 500-S/SP16; HAS 500-S/SP50 ;

HAS 600-S/SP50 ; HAS 600-S/SP54;

HAS 75-S/SP16; HAS 75-S/SP54;



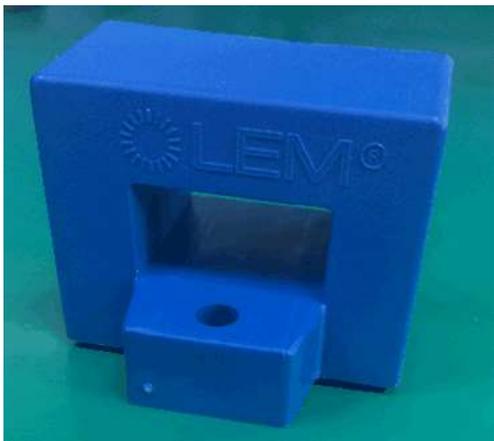
Marking before:



**Marking after (with UL marking + removing LEM + bigger size for CE marking):**



**For the new marking without LEM, please note the LEM logo is already on the plastic**



**case:**

**The other HAS models have already the new marking. The goal here is harmonizing the marking for the whole HAS series.**





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**Test Plans:**

To valid these changes, test plans are available on request to your LEM sales representative.

➤ ***Reason of the technical changes:***

More reliability versus the potentiometers and automatisisation of the line.

For change 4: Standardization of the marking for whole HAS series

**Impact on the product:**

- On the form: YES, potentiometers are not seen anymore
- On the fit: NO
- On the function: NO
- On the reliability: YES, the use of resistors instead of potentiometers is more reliable
- On the data sheet: YES, the dimensions drawing is changing by removing the potentiometers

**Schedule of the modifications:**

Start of delivery of modified products	<b>Change 1: see date codes on page 2</b> <b>Change 2 (process automation): date code 719136 (16<sup>th</sup> May 2019)</b> <b>Change 3 (ESD tray): date code 719109 (19<sup>th</sup> April 2019)</b> <b>Change 4 (marking): date code 719088 (29<sup>th</sup> March 2019)</b>
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Sincerely yours,

Stéphane ROLLIER - Product Manager

