

# Product Change Notification

PCN-Number / Rev / Date	40053 / 1 / 23.05.2019
Category / change type	ACEL active components / SOFTW Change of software / MINOR
Summary	EB10 firmware change due to wrong LIN bus checksum calculation
Motivation, trigger	EB10 firmware change due to wrong LIN bus checksum calculation
Details of change	<p>The EB10 expansion board for ESX-3Xx controllers provides a LIN bus interface.</p> <p>Unfortunately, the implemented checksum calculation is not according to the LIN specification.</p> <p>The following calculation is specified: Eight bit sum with carry is equivalent to sum all values and subtract 255 every time the sum is greater or equal to 256.</p> <p>However, in the EB10 firmware implementation the data bytes are summed up without checking the carry bit. The carry bit handling is only done once after all bytes have been summed up. As a result, the checksum sometimes does not match.</p> <p>This issue can &amp; will be solved with a new EB10 firmware (no new EB10 library necessary), thus there is no need to recompile existing ESX-3Xx application software.</p> <p>No risk for existing applications anticipated, the fix is only a small &amp; local change in EB10 firmware.</p>
Risk assessment	01.07.2019
Effective date	
(Re-)qualification	The changed EB10 firmware was tested in STW's development department. If desired, the new EB10 firmware can be provided on request (HEX file with step-by-step instruction) and programmed on any ESX-3Xx controller.
First product shipment	01.07.2019
Product marking	The EB10 firmware version can be obtained using ESX-3Xx x10_sys_get_component_info API function. Version V1.02r3 (or newer) is used for the changed EB10 firmware.
Company	STW TECHNIC, LP
Comments / objections to	sales@sensor-technik.de
Feedback expected until	14.06.2019

Comments or objections are expected before, otherwise this PCN/PDN will become effective without further notification.

If you need further assistance, you may also contact your local sales representative or our sales department. STW shall not be held liable if this notification is not correctly distributed within your organization.

Affected Product	STW part number	Customer part number
Controller ESX-3XL	64417	n.a.
Controller ESX-3XL	67847	n.a.
Controller ESX-3XL	70273	n.a.
Controller ESX-3XL	71271	n.a.
Controller ESX-3XL	72914	n.a.
Controller ESX-3XL	75931	n.a.
Controller ESX-3XL	83417	n.a.
Controller ESX-3XL	83420	n.a.

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Affected Product	STW part number	Customer part number
Controller ESX-3XL	84362	n.a.
EB-Slot A: EB04, 35770 (12x D0ut 2,5A)	87223	n.a.
Controller ESX-3XL	89121	n.a.