

## Product Change Notice

Issue Date: 22-March-2022

**Change Description:**

New yellow dice replacement for Leadframe Seven Segment Display and Annunciator.

**Parts Affected:**

5082-7620	HDSP-5703	HDSP-F301-EF000	HLMP-2700
5082-7621	HDSP-5703-GH000	HDSP-F303	HLMP-2700-EF000
5082-7623	HDSP-5721	HDSP-F303-EF000	HLMP-2720
5082-7661	HDSP-5721-GH000	HDSP-F303-EF016	HLMP-2720-EF000
5082-7663	HDSP-5723	HDSP-U301	HLMP-2755
HDSP-4201	HDSP-7401	HDSP-U303	HLMP-2755-EF000
HDSP-4203	HDSP-7401-EF000	HDSP-U311	HLMP-2755-EFB00
HDSP-4840	HDSP-7403	HDSP-U313	HLMP-2770
HDSP-4840-GI000	HDSP-7403-EF000	HLMP-2400	HLMP-2785
HDSP-4840-HI000	HDSP-A801	HLMP-2400-EF000	HLMP-2785-EF000
HDSP-5701	HDSP-A803	HLMP-2450	HLMP-2785-EFB00
HDSP-5701-GH000	HDSP-F301	HLMP-2450-EF000	QDSP-4985

**Description and Extent of Change:**

The new die (AlInGaP) will replace current die (GaP) for part numbers above.

**Reasons for Change:**

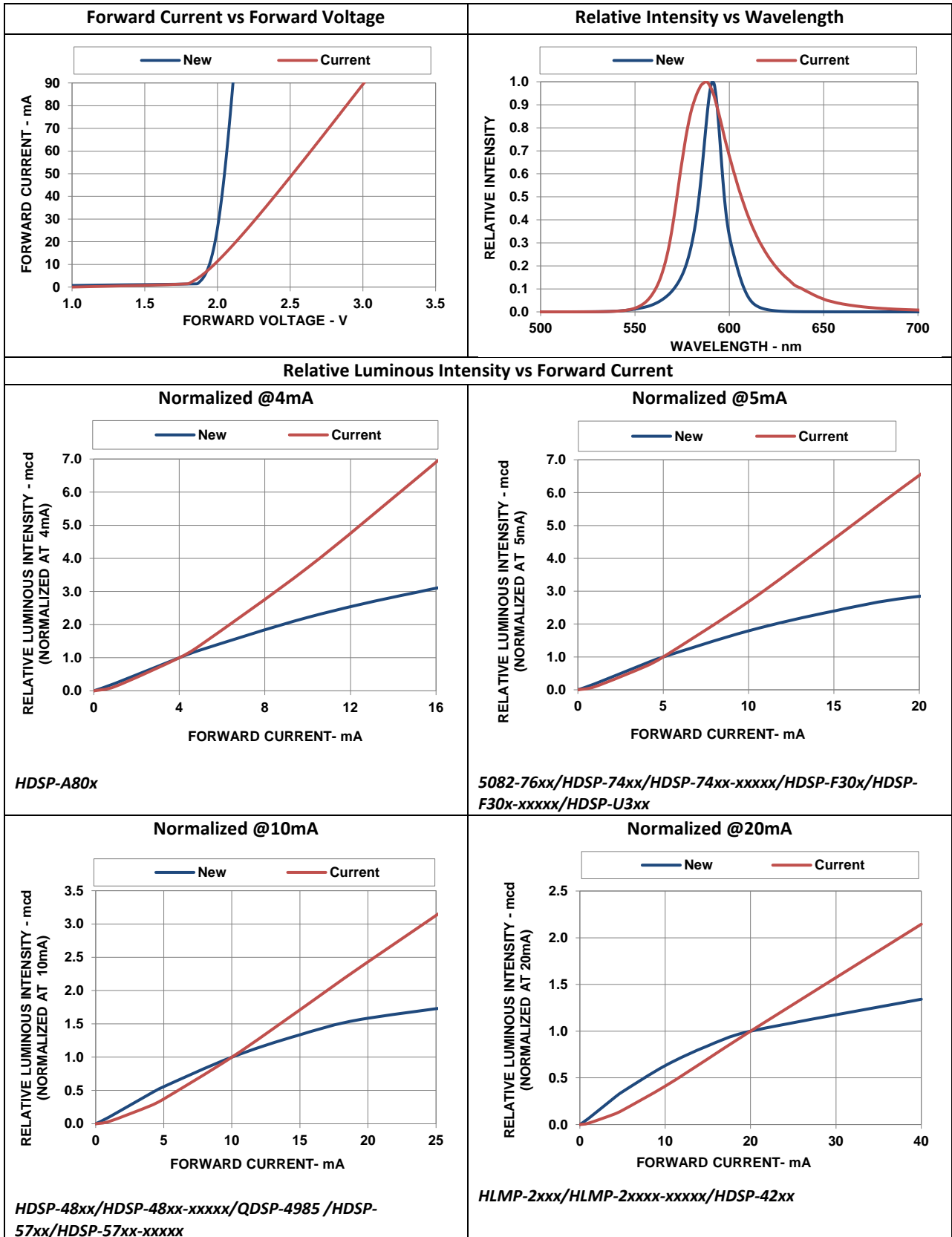
Obsolescence of existing Epi by dice supplier.

**Effect of Change on Fit, Form, Function, Quality, or Reliability:**

There is no change in the product fit &amp; form.

Following are changes in product characteristic:

1. Forward Current vs Forward Voltage
2. Relative Intensity vs Wavelength
3. Relative Intensity vs Forward Current
4. Peak forward current
5. 1 to 4 lv bin higher with the new die source



Part#	Vf max		Peak forward current	
	Current die	New die	Current die	New die
HDSP-420X	3.5V@100mA	2.5V @20mA	135mA	60mA
5082-76xx/HDSP-74xx/HDSP-74xx-xxxxx/HDSP-F30x/HDSP-F30x-xxxxx/HDSP-U3xx/ HDSP-48xx/HDSP-48xx-xxxxx/QDSP-4985/ /HDSP-57xx/HDSP-57xx-xxxxx	2.5V @20mA	2.5V @20mA	60mA	60mA
HDSP-A80x	2.5V @20mA	2.5V @20mA	45mA	60mA
HLMP-2xxx/ HLMP-2xxx-xxxxx	2.6V@20mA	2.6V @20mA	60mA	60mA

Option part # (Current die) will be replaced with option part # (New die) once the PCN is effective and / inventory of current die is fully depleted. Information on option part # (New die) is as tabulated per table below:

Option part # (Current die)	Option part # (New die)
HDSP-5701-GH000	HDSP-5701-HI000
HDSP-5703-GH000	HDSP-5703-HI000
HDSP-5721-GH000	HDSP-5721-HI000
HDSP-7401-EF000	HDSP-7401-GH000
HDSP-7403-EF000	HDSP-7403-GH000
HDSP-F301-EF000	HDSP-F301-GH000
HDSP-F303-EF000	HDSP-F303-GH000
HDSP-F303-EF016	HDSP-F303-GH016

For QDSP-4985 new supportable lv bin as below:

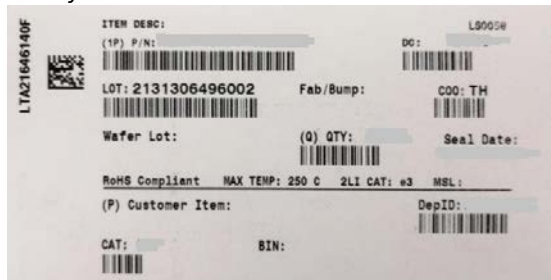
Part#	lv Bin # (Current die)	lv Bin # (New die)
QDSP-4985	G,H	H,I

**Effective Date of Change:**

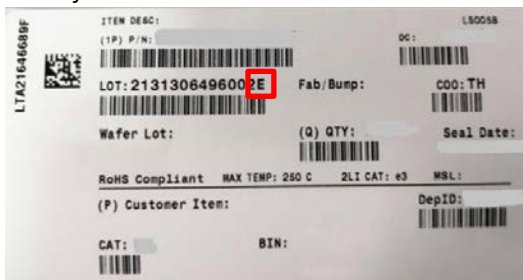
Shipment may contain product from current die and new die starting 1 Aug 2022 until the inventory of current die is fully depleted. There will be no mixed die within the same tube/ lot.

**Part identification:**

*Label for current die*



*Label for new die*



Prefix "E" will be added to the Lot number



**Qualification Data:**

Reliability Test	Stress Condition	Result
Temperature Cycle	-55°C /100°C;15 5 15min	100x (PASSED)
Temperature Humidity Operating Life	85°C/85%RH; 17mA	500hrs (PASSED)
High Temperature Operating Life	55°C; 20mA	1000hrs (PASSED)
Temperature Humidity Storage Life	85°C/85%RH	1000hrs (PASSED)
Low Temperature Operating Life	-40°C; 20mA	1000hrs (PASSED)

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Please contact your Broadcom field sales engineer or Contact Center for any questions or support requirements. Please acknowledge the receipt of the notice within 30 days of delivery. Lack of acknowledgement within 30 days constitutes acceptance of the change per JEDEC J-STD-046.