



PCN: V07-069-48475418-0A

Product Change Notice

Issue Date: 3rd October 2007

Change Type:

Avago Technologies has qualified an alternate dice source for GaP Red, Yellow, and Orange devices which will be used in Through Hole S4 and Annunciator.

Parts Affected:

HDSP-4501	5082-7610	5082-7651-DE000
HDSP-4503	5082-7610-CD000	5082-7653
HDSP-F301	5082-7611	5082-7653-DD000
HDSP-F301-DE000	5082-7611-DE000	5082-7653-DE000
HDSP-F303	5082-7613	HDSP-3350
HDSP-F303-DE000	5082-7613-CD000	HDSP-3351
HDSP-F303-DE016	5082-7616	HDSP-3353
HDSP-F307	5082-7616-DD000	HDSP-3356
HDSP-F308	HDSP-U301	5082-7656
HDSP-F401	HDSP-U303	HDSP-4200
HDSP-F403	HDSP-U311	HDSP-4201
HDSP-F411	HDSP-U313	HDSP-4203
HDSP-F413	HDSP-U401	HDSP-4205
HDSP-F407	HDSP-U403	HDSP-4206
HDSP-F408	HDSP-U411	HDSP-3900
HDSP-F201	HDSP-U413	HDSP-3901
HDSP-F201-DE000	HDSP-U413-LN000	HDSP-3901-EF000
HDSP-F203	HDSP-U201	HDSP-3903
HDSP-F203-DE000	HDSP-U203	HDSP-3903-EF000
HDSP-F211	HDSP-U203-CD000	HDSP-3905
HDSP-F211-DE000	HDSP-U211	HDSP-3906
HDSP-F213	HDSP-U211-CD000	HDSP-N401
HDSP-F213-DE000	HDSP-U213	HDSP-N403
HDSP-F207	HDSP-U213-CD000	HDSP-5721
HDSP-F208	HDSP-U213-D0000	HDSP-5721-FG000
HDSP-315Y	QDSP-U238	HDSP-5723
HDSP-315Y-KMP00	QDSP-U239	HDSP-5521
HDSP-316Y	5082-7660	HDSP-5521-GG000
HDSP-316Y-KMP00	5082-7661	HDSP-5521-GH000
HDSP-315E	5082-7663	HDSP-5523
HDSP-315L	5082-7663-D0B00	HDSP-5523-GH000
HDSP-316E	5082-7666	HDSP-K211
HDSP-316L	5082-7650	HDSP-K211-GH000
5082-7620	5082-7650-DD000	HDSP-K213
5082-7621	5082-7650-DE000	HDSP-K213-GH000
5082-7623	5082-7651	HDSP-K701
5082-7626	5082-7651-DD000	QDSC-A000

HDSP-K401	HDSP-H211-GH000	HDSP-A413
HDSP-K403	HDSP-H213	HLCP-J100
HDSP-K413	HDSP-H213-GH000	HDSP-4830
HDSP-G301	HDSP-H411	HDSP-4830-GH000
HDSP-G303	HDSP-H401	HDSP-4830-HH000
HDSP-G201	HDSP-H403	HDSP-4840
HDSP-G201-EF000	HDSP-H413	HDSP-4840-FG000
HDSP-G203	HDSP-H413-EF000	HDSP-4840-FGB00
HDSP-G211	HDSP-H413-FG000	QDSP-4985
HDSP-G213	HDSP-7401	HDSP-4832
HDSP-G401	HDSP-7401-C0Z00	HDSP-4836
HDSP-G403	HDSP-7401-DE000	QLCP-M082
HDSP-G411	HDSP-7402	QLCP-M089
HDSP-G413	HDSP-7403	QLCP-M096
HDSP-515E	HDSP-7403-DE000	HLMP-2600
HDSP-515L	HDSP-7404	HLMP-2600-EF000
HDSP-515L-FG000	HDSP-7407	HLMP-2655
HDSP-516E	HDSP-7408	HLMP-2655-EF000
HDSP-516L	HDSP-A801	HLMP-2700
HDSP-515Y	HDSP-A803	HLMP-2700-EF000
HDSP-516Y	HDSP-A807	HLMP-2755
HDSP-516Y-KLB00	QDSP-7488	HLMP-2755-EF000
HDSP-516Y-KMP00	HDSP-7501	HLMP-2755-EFB00
HDSP-5701	HDSP-7501-CD000	HLMP-2950
HDSP-5701-FG000	HDSP-7502	HLMP-2965
HDSP-5703	HDSP-7502-CD000	QLMP-2976
HDSP-5703-FG000	HDSP-7503	HLMP-2620
HDSP-5707	HDSP-7503-CD000	HLMP-2620-EF000
HDSP-5708	HDSP-7503-DD000	HLMP-2635
HDSP-5501	HDSP-7504	HLMP-2670
HDSP-5811	HDSP-7507	HLMP-2685
HDSP-5501-GG000	HDSP-7508	HLMP-2685-EF000
HDSP-5501-GH000	HDSP-7508-CD000	HLMP-2720
HDSP-5503	HDSP-7511	HLMP-2720-EF000
HDSP-5813	HDSP-7511-CD000	HLMP-2735
HDSP-5503-GG000	HDSP-7513	HLMP-2770
HDSP-5503-GH000	HDSP-7513-CD000	HLMP-2785
HDSP-5507	HDSP-7517	HLMP-2785-EF000
HDSP-5507-GG000	HDSP-7518	HLMP-2785-EFB00
HDSP-5507-GH000	HDSP-A211	HLMP-2300
HDSP-5508	HDSP-A213	HLMP-2300-EF000
HDSP-5508-GH000	HDSP-A213-CD000	HLMP-2323
HDSP-5551	QDSP-7590	HLMP-2400
HDSP-5553	HDSP-A401	HLMP-2400-EF000
HDSP-5553-BC000	HDSP-A403	HLMP-2423
HDSP-5557	HDSP-A408	HLMP-2316
HDSP-5558	HDSP-A407	HLMP-2416
HDSP-H211	HDSP-A411	HLMP-2366
HLMP-2350	HLMP-2450	QLCP-B248
HLMP-2350-EF000	HLMP-2450-EF000	

Description and Extent of Change:

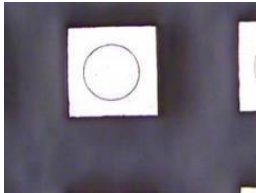
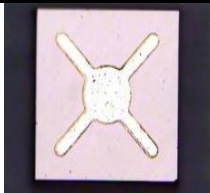
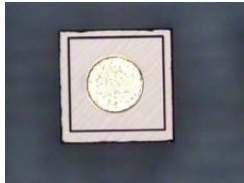
The selected die shall be the alternate choice for GaP Red, Yellow, and Orange Through Hole S4 and Annunciator, which will serve the same functionality as the existing die.

Reasons for Change:

This is to ensure continuous supply of the GaP Red, Yellow, and Orange Through Hole S4 and Annunciator.

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

There will be no change on form, fit, function, quality or reliability on the finished products. However there is a slight difference in the die top surface between the existing and alternate die. Below are the pictures showing the difference between them.

Die Type	Picture	
	Existing die	Alternate die
GaP Red		
GaP Yellow		
GaP Orange		

Effective Date of Change:

The shipment of the alternate dice source will begin from 3rd January 2008 (WW01'08) onward. From this date onwards, shipment may contain either the existing or alternate parts.

Qualification Data:

Qualification data has been generated and approved.
These are the main qualification data for reference.

Item	Test Type	Condition	Total sample size ^[2]	Test Criteria	Test Result
1	2XTTW -> Temperature cycle (TMCL)	-55 to 100°C, 15 mins dwell, 5 minutes transfer (All colors)	400	No open/short	Passed 100cycles
2	High Temperature Operating Life test ^[1] (HTOL)	55°C, 40mA (max rated If for Yellow)	22	No open/short, Iv degradation <50%	Passed 1000hrs
		55°C, 30mA (max rated If for Red)	22		Passed 1000hrs
3	Wet High Temperature Operating Life test ^[1] (WHTOL)	85°C/85%RH, 15mA (Yellow)	22		Passed 1000hrs
		85°C/85%RH, 10mA (Red)	22		Passed 1000hrs

Note :

[1] Accelerated test condition with higher stress current was used to achieve the equivalent 1000hrs at typical stress current.

These changes have been reviewed and approved by Avago Technologies engineers and managers per Avago Technologies procedure: Change Control and Customer Notification, A-5962-6052-80.

Please contact your Avago Technologies field sales engineer or Contact Center (<http://www.avagotech.com/contact/>) for any questions or support requirements. Please return any response as soon as possible, but not to exceed 30 days.