

L4 - L6 Hybrid Production

Hybrid #	Received	Passive Components Loaded / Cleaned	Sent to UCSC	APV25s Loaded	Wirebonded	Tested	Results	Sent to SLAC	Glued to Carbon Fiber	Part of Half-Module	Notes
L4-L6 hybrid 1	02/11/2014	02/20/2014 (LS)	02/21/2014 (PH/HS)	02/21/2014 (FM)	02/24/2014 (FM)	02/24/2014 (OM)	plots	02/25/2014 (VF/PH)			The temperature sensor was found to be faulty on 04/23/2014 (RH). The R90 00hm resistor was added 5/8/2014 (PH).
L4-L6 hybrid 2	02/11/2014	02/20/2014 (LS)	02/21/2014 (PH/HS)	02/21/2014 (FM)	02/24/2014 (FM)	02/24/2014 (OM)	Baseline and Response (OM)	02/25/2014 (VF/PH)			Channels 509, 510, 511 have low response and are likely caused by lifted corner on the APV. The hybrid was sent back to UCSC on 03/02/2014 (VF/PH) so the damaged APV could be replaced. The high density connector was found broken at SLAC on 04/24/2014 (PH). Need R90 rework.
L4-L6 hybrid 3	02/11/2014	02/24/2014 (LS)	02/25/2014 (PH/HS)	02/26/2014 (FM)	02/27/2014 (FM)	02/27/2014 (OM/TO)	Baseline and Response (OM)	03/02/2014 (VF/PH)	03/10/2014 (TKN)	L4-L6 half-module 0	Need R90 rework.
L4-L6 hybrid 4	02/11/2014	02/24/2014 (LS)	02/25/2014 (PH/HS)	02/26/2014 (FM)	02/27/2014 (FM)	02/27/2014 (OM/TO)	Baseline and Response (OM)	03/02/2014 (VF/PH)	03/10/2014 (TKN)	L4-L6 half-module 0	Need R90 rework.
L4-L6 hybrid 5	02/11/2014	02/24/2014 (LS)	02/25/2014 (PH/HS)	Rejected (FM)							
L4-L6 hybrid 6	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	03/25/2014 (FM)	03/26/2014 (FM)	03/26/2014 (OM)	Baseline and Response (OM)	03/26/2014 (VF/PH)	03/27/2014 (TKN)	L4-L6 half-module 1	Need R90 rework.
L4-L6 hybrid 7	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	03/25/2014 (FM)	03/26/2014 (FM)	03/26/2014 (OM)	Baseline and Response (OM)	03/26/2014 (VF/PH)	03/27/2014 (TKN)	L4-L6 half-module 1	Need R90 rework.
L4-L6 hybrid 8	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	03/25/2014 (FM)	03/26/2014 (FM)	03/26/2014 (OM)	Baseline and Response (OM)	03/26/2014 (VF/PH)	6/4/2014 (TKN)	L4 - L6 half-module 9	The high density connector needs to be potted. R90 reworked 5/12/2014. No flux UHV solder used, not pretty but connection is there (PH).
L4-L6 hybrid 9	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	04/28/2014 (FM)	04/29/2014 (FM)	04/29/2014 (OM)	Baseline and Response (OM)	04/29/2014 (OM)	04/30/2014 (TKN)	L4-L6 half-module 2	Need R90 rework.
L4-L6 hybrid 10	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	04/28/2014 (FM)	04/29/2014 (FM)	04/29/2014 (OM)	Baseline and Response (OM)	04/29/2014 (OM)	04/30/2014 (TKN)	L4-L6 half-module 2	Need R90 rework.

L4-L6 hybrid 11	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/06/2014 (TKN)	L4-L6 half-module 3	Need R90 rework.
L4-L6 hybrid 12	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/06/2014 (TKN)	L4-L6 half-module 3	Need R90 rework.
L4-L6 hybrid 13	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/06/2014 (PH)	L4-L6 half-module 4	Need R90 rework.
L4-L6 hybrid 14	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/06/2014 (PH)	L4-L6 half-module 4	Need R90 rework.
L4-L6 hybrid 15	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/15/2014 (TKN)	L4-L6 half-module 7	R90 reworked 5/15/14 (PH).
L4-L6 hybrid 16	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/01/2014 (FM)	05/02/2014 (FM)	05/02/2014 (TO/OM)		05/02/2014 (OM)	05/15/2014 (TKN)	L4-L6 half-module 7	R90 reworked 5/15/14 (PH).
L4-L6 hybrid 17	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/13/2014 (TKN)	L4-L6 half-module 5	
L4-L6 hybrid 18	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/13/2014 (TKN)	L4-L6 half-module 5	
L4-L6 hybrid 19	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/13/2014 (PH)	L4-L6 half-module 6	
L4-L6 hybrid 20	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/13/2014 (PH)	L4-L6 half-module 6	Traces visibly narrower from over-etching
L4-L6 hybrid 21	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/15/2014 (PH)	L4-L6 half-module 8	
L4-L6 hybrid 22	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/11/2014 (FM)	05/12/2014 (FM)	05/12/2014 (OM)		05/13/2014 (VF/PH)	05/15/2014 (PH)	L4-L6 half-module 8	
L4-L6 hybrid 23	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/14/2014 (FM)	05/15/2014 (FM)	05/15/2014 (TO)		05/18/2014 (VF/TKN)	6/4/2014 (TKN)	L4 - L6 half-module 9	
L4-L6 hybrid 24	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/14/2014 (FM)	05/15/2014 (FM)	05/15/2014 (TO)	Bad Hybrid				Hybrid baseline and response look choppy. Further testing is needed to determine what may be causing the issues.
L4-L6 hybrid 25	02/11/2014	03/24/2014 (LS)	03/24/2014 (TKN/VF)	05/29/2014 (FM)	05/30/2014 (FM)	05/30/2014 (TO)		06/01/2014 (VF/PH)	6/4/2014 (TKN)	L4 - L6 half-module 10	
L4-L6 hybrid 26			05/28/2014 (TKN/VF)	05/29/2014 (FM)	05/30/2014 (FM)	05/30/2014 (TO)		06/01/2014 (VF/PH)	6/4/2014 (TKN)	L4 - L6 half-module 10	The gain of calibration group 1 is higher than the rest of groups. However, the response for these channels looks fine.
L4-L6 hybrid 27			05/28/2014 (TKN/VF)		06/02/2014 (FM)	06/02/2014 (TO)				L4 - L6 half-module 11	
L4-L6 hybrid 28			05/28/2014 (TKN/VF)		06/02/2014 (FM)	06/02/2014 (TO)				L4 - L6 half-module 11	Noise increases by ~1.5 ADC counts (~15.5 to 18 ADC Counts) across the hybrid. The response for all channels looks fine.
L4-L6 hybrid 29			05/28/2014 (TKN/VF)		06/02/2014 (FM)	06/02/2014 (TO)				L4 - L6 half-module 12	
L4-L6 hybrid 30			05/28/2014 (TKN/VF)		06/02/2014 (FM)	06/02/2014 (TO)				L4 - L6 half-module 12	

L4-L6 hybrid 31			05/28/2014 (TKN /VF)		06/02/2014 (FM)						
L4-L6 hybrid 32			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	06/20/2014 (TO)					
L4-L6 hybrid 33			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	06/20/2014 (TO)					
L4-L6 hybrid 34			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Failed bond re-qualification					
L4-L6 hybrid 35			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Failed bond re-qualification					
L4-L6 hybrid 36			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	06/20/2014 (TO)					
L4-L6 hybrid 37			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	06/20/2014 (TO)					
L4-L6 hybrid 38			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Failed bond re-qualification					
L4-L6 hybrid 39			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Failed during bonding - input side.					
L4-L6 hybrid 40			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Failed during bonding - input side.					
L4-L6 hybrid 41			06/19/2014 (BR)	06/19/2014 (FM)	06/20/2014 (FM)	Bad metal on hybrid shelf. Rejected					
L4-L6 hybrid 42			06/19/2014 (BR)	Failed Temp sensor test							
L4-L6 hybrid 43			08/04/2014 (OM)	08/05/2014 (FM)	08/06/2014 (FM)	08/06/2014 (TO/OM)		08/07/2014 (OM)			
L4-L6 hybrid 44			08/04/2014 (OM)	08/05/2014 (FM)	08/06/2014 (FM)	08/06/2014 (TO/OM)		08/07/2014 (OM)			
L4-L6 hybrid 45			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					
L4-L6 hybrid 46			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					
L4-L6 hybrid 47			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					
L4-L6 hybrid 48			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					
L4-L6 hybrid 49			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					
L4-L6 hybrid 50			08/04/2014 (OM)	08/11/2014 (FM)	08/12/2014 (FM)	08/12/2014 (TO)					

Hybrid Documentation (schematics, layout, etc.)

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