

Progress Report

RIKEN/RBRC

Itaru Nakagawa

3rd Batch HDI Delivery



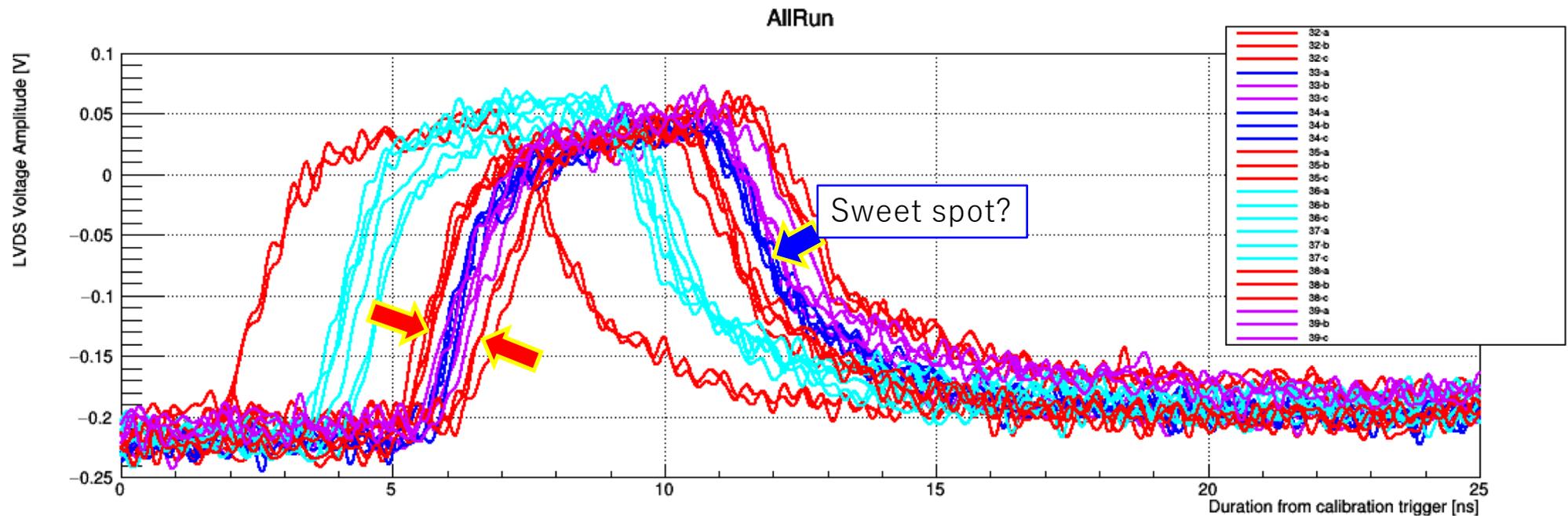
- 23 HDIs from another LOT were delivered in July 21st as planned.
- To be forwarded to BNL on August 3rd. Exporting paper work is in progress.
- As the agreement between Yamashita and us in May, 100 HDIs are to be produced as the batch-3. So far,

Delivery Day	Batch	Order #	LOT #	Quantity	HDI Serial No.	Incremented Quantity	Inspection	Result	Shipped to Taiwan
2019/1/23	Preproduction	349670	302382	6					
2019/2/6		349670	302725	4					
2019/9/11		350963	306716	20					
2019/11/20		Exchanged	307469	1					
2020/4/2	Batch-1A	352075	310184	9	1	9	9		
2020/4/2		352075	310185_1	7	10	16	16		
2020/4/2		352075	310185_2	13	17	29	29		
2020/4/2		352075	310186	30	30	59	59	50	Good?
2020/4/28	Batch-1B	352075	310188	17	60	76	76	70	bad
2020/4/28		352075	310189	24	77	100	100	80, 94	bad
2020/6/8		352075	311139	2	101	102	102		
2020/6/8		352075	311587_1	7	103	109	109	105	6
2020/6/17		352075	311587_2	2	110	111	111		
2020/6/17		352075	311614	15	112	126	126	122	14
2020/6/24		352075	311615	21	127	147	147	127	20
2020/7/9		352075	312095	20	148	167	167	-160	
2020/7/9		352075	312096_1	6	168	173	173		
2020/7/21		352075	312096_2_1	7	174	180	180		
2020/7/28	Batch-1A	Exchanged	312096_2_2	1	24	24	180		
2020/9/28	Batch-2	353110	312532	20	181	200	200		
2020/9/28		353110	312533	16	201	216	216		
2020/9/29		353110	312534	7	217	223	223	-220	
2020/9/29		353110	312535	14	224	237	237		
2020/9/29		353110	312536	7	238	244	244		
2020/10/27		353110	313304	24	245	268	268	265	3
2020/11/27		353110	313673	2	269	270	270		2
2021/6/28	Batch-3		317333_2_2	11	271	281	281		
2021/7/5			317338	14	282	295	295		
2021/7/19			317341	23	296	319	319		

HDI Stats

48 HDI's are produced as Batch-3

Half Entry Issue

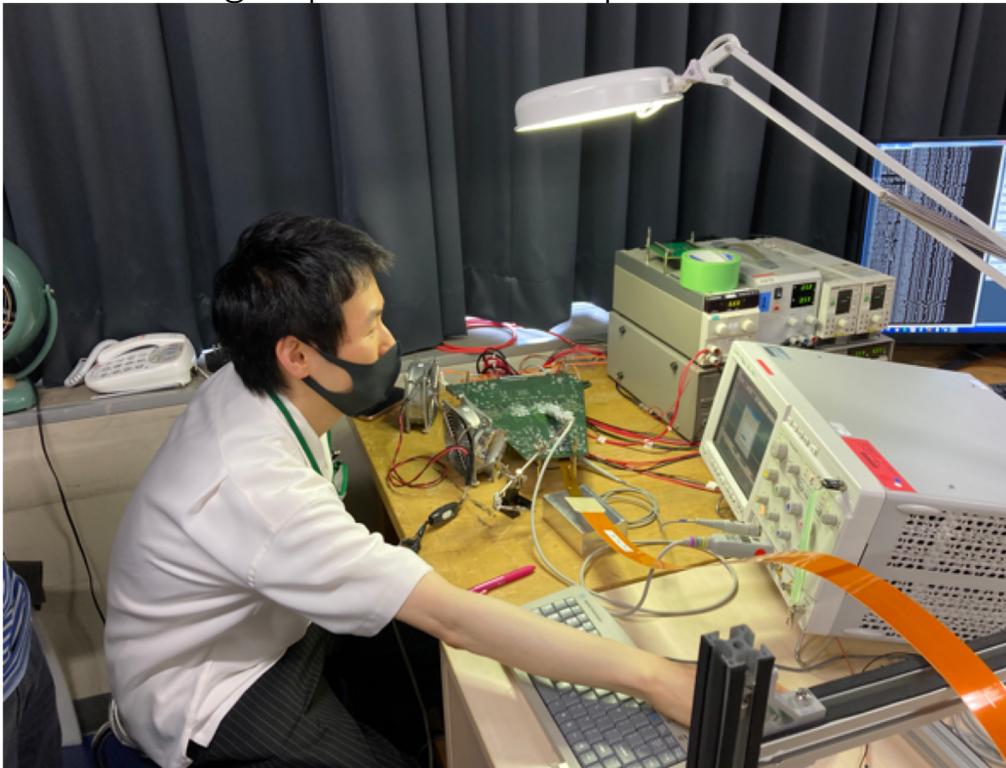


- We will have another high speed oscilloscope measurements of the wave form at RIKEN next Monday (19th) in RIKEN where we don't observe half entry issues unlike NWU.
- If our hypothesis is true, then all observation should appear in **blue band** region (sweet spot) above this time.
- The phase follower FPGA is to be tested in NWU with ROC-7 which has upgraded regulators to 3.0V.

Wave Form Measurements at RIKEN

July 19, 20th

With High Speed Oscilloscope



Mr. Takashi Kondo (Tokyo Metropolitan Industrial Technology Research Center)

Wave Form Measurements at RIKEN



- Aimed to have better understanding in the half entry issue.
- Some of the interpretation regarding the half entry issue needs to be updated.
- Analysis results will be presented in the next couple of weeks.

More information in <https://indico2.riken.jp/event/3804/>

Short term schedule in RIKEN Test Bench

- Further stability study of the half entry issue in different conditions reflecting the observation yesterday.
- Initialization sequence development.
- Windows-10 upgrade of the standalone from Windows-7.
- The fixture development to improve the bus extender yield rate.
- Preparation for the 1008 ROC tests.