PRINCETON
UNIVERSITY

Algo Unpacked
Bit Reference

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Bit Output Reference

Bit Output Reference, Link 1/1

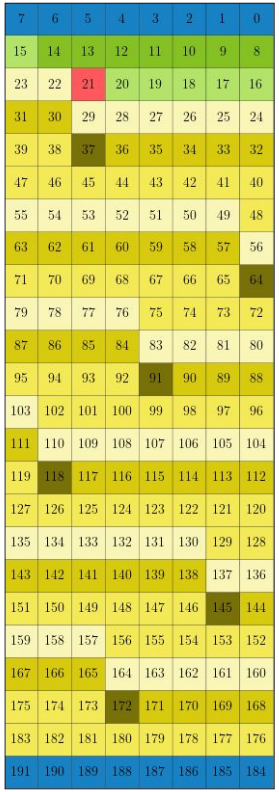
Type	Bits		Range
Link Alignment & CRC	8		0–7
Anomaly Detection, Decimal Part	7	13	8–14
Anomaly Detection, Integer Part	6		15–20
Heavy Ion Bit	1		21
Boosted Jets: First	27	162	22–48
Boosted Jets: Second	27		49–75
Boosted Jets: Third	27		76–102
Boosted Jets: Fourth	27		103–129
Boosted Jets: Fifth	27		130–156
Boosted Jets: Sixth	27		157–183
Link Alignment & CRC	8		184–191

LEGACY

Bit Output Reference, Link 1/1

Type	Bits	Range
Boosted Jets: First	28	27–0
Anomaly Detection, Integer Part	4	31–28
Boosted Jets: Second	28	59–32
Anomaly Detection, Integer Part	4	63–60
Boosted Jets: Third	28	91–64
Anomaly Detection, Decimal Part	4	95–92
Boosted Jets: Fourth	28	123–96
Anomaly Detection, Decimal Part	4	127–124
Boosted Jets: Fifth	28	155–128
Heavy Ion Bit	4	159–156
Boosted Jets: Sixth	28	187–160
Heavy Ion Bit	4	191–188

Bit Output Reference, Plot, Link 1/1



7	6	5	4	3	2	1	0
15	14	13	12	11	10	9	8
23	22	21	20	19	18	17	16
31	30	29	28	27	26	25	24
39	38	37	36	35	34	33	32
47	46	45	44	43	42	41	40
55	54	53	52	51	50	49	48
63	62	61	60	59	58	57	56
71	70	69	68	67	66	65	64
79	78	77	76	75	74	73	72
87	86	85	84	83	82	81	80
95	94	93	92	91	90	89	88
103	102	101	100	99	98	97	96
111	110	109	108	107	106	105	104
119	118	117	116	115	114	113	112
127	126	125	124	123	122	121	120
135	134	133	132	131	130	129	128
143	142	141	140	139	138	137	136
151	150	149	148	147	146	145	144
159	158	157	156	155	154	153	152
167	166	165	164	163	162	161	160
175	174	173	172	171	170	169	168
183	182	181	180	179	178	177	176
191	190	189	188	187	186	185	184

- Link Alignment & CRC
- Anomaly Detection, Decimal Part
- Anomaly Detection, Integer Part
- Heavy Ion Bit
- Boosted Jets: ϕ
- Boosted Jets: η
- Boosted Jets: Side
- Boosted Jets: E_T

LEGACY

Bit Output Reference, Plot, Link 1/1

31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64
127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96
159	158	157	156	155	154	153	152	151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128
191	190	189	188	187	186	185	184	183	182	181	180	179	178	177	176	175	174	173	172	171	170	169	168	167	166	165	164	163	162	161	160

- Anomaly Detection, Integer Part
- Anomaly Detection, Decimal Part
- Heavy Ion Bit
- Boosted Jets: E_T
- Boosted Jets: η
- Boosted Jets: Side
- Boosted Jets: ϕ
- Boosted Jets: Flag

Bit Output Reference, Table, Link 1/1

Byte	7	6	5	4	3	2	1	0
0	Link Alignment & CRC							
1	AD: Decimal	AD: Integer						
2	Bjets1		Heavy Ion Bit	AD: Decimal				
3	Bjets1							
4	Bjets1							
5	Bjets1							
6	Bjets2							Bjets1
7	Bjets2							
8	Bjets2							
9	Bjets3				Bjets2			
10	Bjets3							
11	Bjets3							
12	Bjets4	Bjets3						
13	Bjets4							
14	Bjets4							
15	Bjets4							
16	Bjets5						Bjets4	
17	Bjets5							
18	Bjets5							
19	Bjets6			Bjets5				
20	Bjets6							
21	Bjets6							
22	Bjets6							
23	Link Alignment & CRC							

LEGACY

Bit Output Reference, Table, Link 1/1

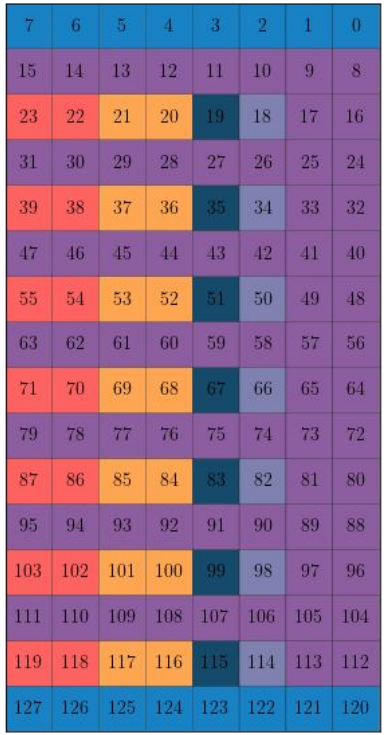
Byte	31-28	27-0
0	AD: Integer	Bjets1
1		Bjets2
2	AD: Decimal	Bjets3
3		Bjets4
4	Heavy Ion Bit	Bjets5
5		Bjets6

Bit Input Reference

Bit Input Reference, Link 1/36

Type		Bits		Range
Link Alignment & CRC		8		0–7
Region 1	ET	10	16	8–17
	EG Veto	1		18
	Tau Veto	1		19
	Phi	2		20–21
	Eta	2		22–23
Region 2		16		24–39
Region 3		16		40–55
Region 4		16		56–71
Region 5		16		72–87
Region 6		16		88–103
Region 7		16		104–119
Link Alignment & CRC		8		120–127

Bit Input Reference, Plot, Link 1/36



- Link Alignment & CRC
- Region ET
- Region EG Veto
- Region Tau Veto
- Region iη
- Region iϕ

Bit Input Reference, Table, Link 1/36

Byte	7	6	5	4	3	2	1	0
0	Link Alignment & CRC							
1	Region 1							
2								
3	Region 2							
4								
5	Region 3							
6								
7	Region 4							
8								
9	Region 5							
10								
11	Region 6							
12								
13	Region 7							
14								
15	Link Alignment & CRC							