

OB Electrical Services DB Numbering

Proposal to be discussed

From OB Nomenclature:

Item	Identifier
Serial Powering Chain	SP
Rigid Flex	RF
Rigid Board	RB
Wing	WN
Pigtail	PG
Module connector (pigtail-wing interface)	MC
Type-1 Data connector	DC
Type-1 Power & DCS connector	PC

- Based on Paki's proposal:

https://indico.cern.ch/event/1036598/contributions/4398990/attachments/2261350/3838339/type0_services_intoPDB%209.6.2021_fmuno.pdf

- Adapted to OB specifics needs:

- 20 → ATLAS
 - U → Upgrade
 - PB → Pixel Barrel
 - YY → Component → **PP** (for PP0) or **PG** (for pigtails)
 - N1 → **0** (Prototype) or **1** (Pre-production) or **2** (Production)
 - N2 → Layer → **2, 3, 4** or **9** (all layers)
 - N3 → Type → **0** (flat) or **1** (Inclined)
 - N4 → Flavor → **0/1** (Flat Pigtail side X- /X+) or **0/1** (Inclined front/back pigtails) or **0/1** (short/long PP0 Flat) or **9 ?** (unique flavor for inclined PP0 ? Or multiple ?). See next slide.
- RF like in OB nomenclature for Rigid Flex
- (Should be top and bottom)
- 0,1,2,3 (see p.3)
- 1, 2 (see p.3)

In the last discussion (Ob services meeting 9.6.21) we said one type for L2 and one type for L3 and L4

Component	Type	#SP Chain	Flavor	PREFIX	N1 (Proto, PreProd, Prod)	N2 (Layer)	N3 (Type)	N4 (Flavor)
PP0	Flat	6	unique	20-U-PB-PP ^{RF}	0, 1, 2	9	0	0
		12	unique	20-U-PB-PP ^{RF}	0, 1, 2	9	0	1
	Inclined	SP1 SP2?	? ^{1,2}	20-U-PB-PP ^{RF}	0, 1, 2	2, 3, 4	1	? ^{1,2}
Pigtail	Flat		X- ^{Top}	20-U-PB-PG	0, 1, 2	9	0	0
			X+ ^{Bottom}	20-U-PB-PG	0, 1, 2	9	0	1
	Inclined		Front	20-U-PB-PG	0, 1, 2	9 ² 34	1	0
			Back	20-U-PB-PG	0, 1, 2	9 ² 34	1	1
			FrontLastRing BackLastRing	20-U-PB-PG	0,1,2 0,1,2	2, 34 2, 34	1 1	2 3

- Based on Stephan's proposal:
- https://indico.cern.ch/event/1036598/contributions/4401699/attachments/2261353/3838346/20210609_EC_Type-1_ProdDB_info_v2.pdf
- Adapted to OB specifics needs:
 - 20 → ATLAS
 - U → Upgrade
 - PB → Pixel Barrel
 - YY → Component Type-1: D1=Data link, **P1**= SP link, E1= Env link
 - N1 → **0** (Prototype) or **1** (Pre-production) or **2** (Production)
 - N2 → Type/Flavor → **0** to **7** (See next slide)
 - N3 → Length (**0**, **1** or **2**)
 - N4 → ?
 - N5 → ?

Can we use PB for power bundle, DB for data bundle like in the OB nomenclature?
E1 or EB ?



Many different lengths (to check with Diego if <10 otherwise two digits required)

Prod DB identifiers for OB power bundle flavours

20-U-PB-P1-(N1)-**N2**

	Layer	# SP chains	Flavour in AT2-IP-ES-0016	proposal for N2
Flat	L2	4	OBF2	0
	L3	4	OBF3_1	1
		2	OBF3_2	2
	L4	4	OBF4	3
Inclined	L2	4	OBI2	4
	L3	4	OBI3	5
	L4	4	OBI4_1	6
		2	OBI4_2	7

based on the pixel connectivity spreadsheet for electrical services AT2-IP-ES-0016