

HUAWEI ENTERPRISE **A BETTER WAY**

PD Types for bt Standard

Yan Zhuang, Huawei Technologies

Rui Hua, Huawei Technologies

enterprise.huawei.com

HUAWEI TECHNOLOGIES CO., LTD.



Some thoughts before the discussion

- **AT/AF/BT PD is not standard terminology**
- **PDs are categorized into types**
- **Conflicting terms make discussions inefficient and confusing**

Motivation

To achieve consensus on PD types in bt standard and use the terminologies in future discussions.

How do we categorize PDs?

➤ ***By PD Power levels?***

➔ 13W or 25.5W or 49W or 90W(TBD)

➤ ***By Power channels?***

➔ 2-pair PD or 4-pair PD

➤ ***By cable current?***

➔ 0.35 A, 0.6 A...

Suggestion 1: PD types for bt

Type	Max Power Level	Number of pairs that PDs can simultaneously require power from ^{Note}	Current on PD PI (A)
1	≤ 13W	2P/4P	0.35
2	≤ 25.5W	2P/4P	0.6
3	≤ 51W ^{TBD}	4P	1.2 ^{TBD}
4	≤ 100W ^{TBD}	4P	TBD

- PD are categorized by **power levels**.
- Type 1 and Type 2 is reused for 4P PD which are allowed to require power simultaneously from ALT A and ALT B.
- **Legacy Type 1 and Type 2 2P PDs are referred to AT/AF PDs in nowadays.**

Note: PDs can accept power over 4 pairs or 2 pairs if not cause any problem.

Suggestion 2: PD types for bt

Type	Max Power Level	Number of pairs that PDs can simultaneously require power ^{Note} from	Current on PD PI (A)
1	$\leq 13W$	2P	0.35
2	$\leq 25.5W$	2P	0.6
3	$\leq 13W$	4P	0.35
3	$\leq 25.5W$	4P	0.6
3	$\leq 51W^{TBD}$	4P	1.2 ^{TBD}
4	$\leq 100W^{TBD}$	4P	TBD

- PD are categorized by power levels and pairs used for requiring power simultaneously.
- New Types for 4P PDs.

Note: PDs can accept power over 4 pairs or 2 pairs if not cause any problem.

Thank you!