

HUAWEI ENTERPRISE **A BETTER WAY**

# Consideration on Single load and Dual load PD

Yan Zhuang, Huawei Technologies

Rui Hua, Huawei Technologies

**[enterprise.huawei.com](http://enterprise.huawei.com)**

HUAWEI TECHNOLOGIES CO., LTD.

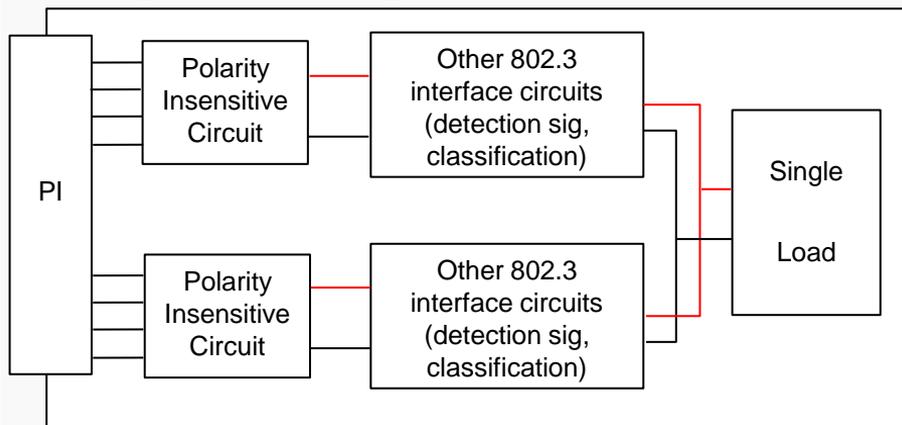


# Motivation

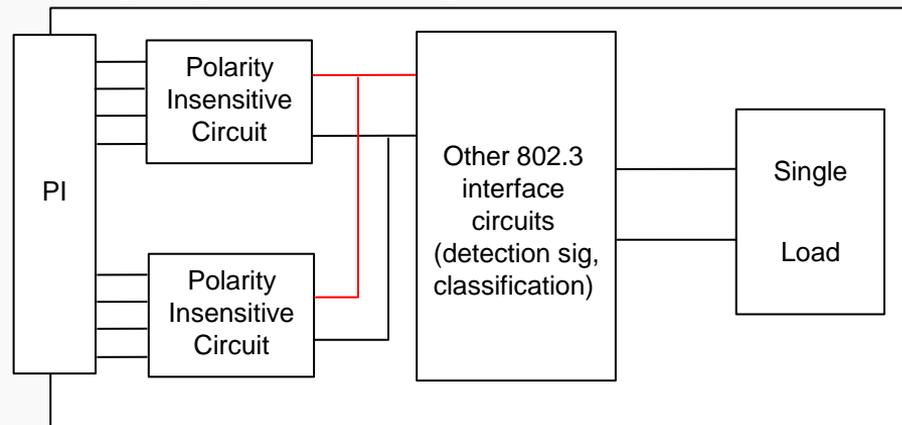
- **Discuss possible architectures of single load and dual load PD.**
- **Analysis effects of different class in these PD architectures**
- **Options**

# Possible architectures

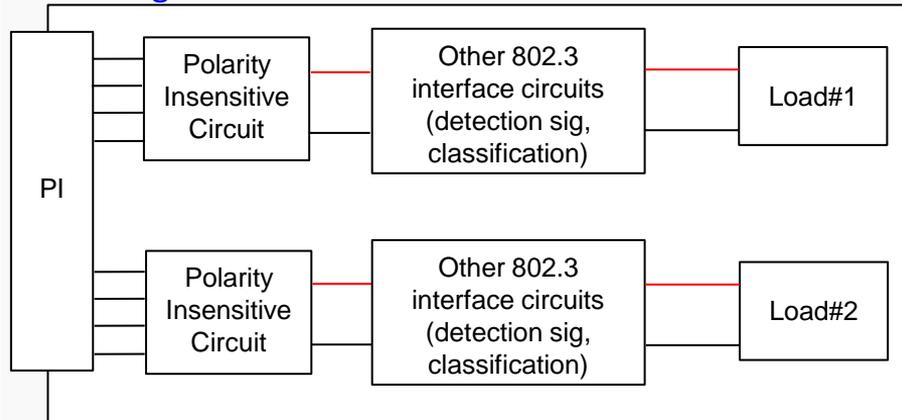
## Dual signature with single load PD



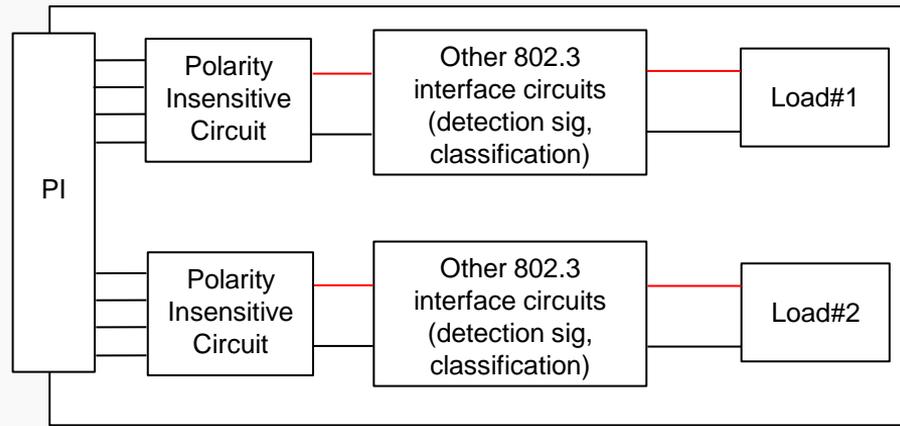
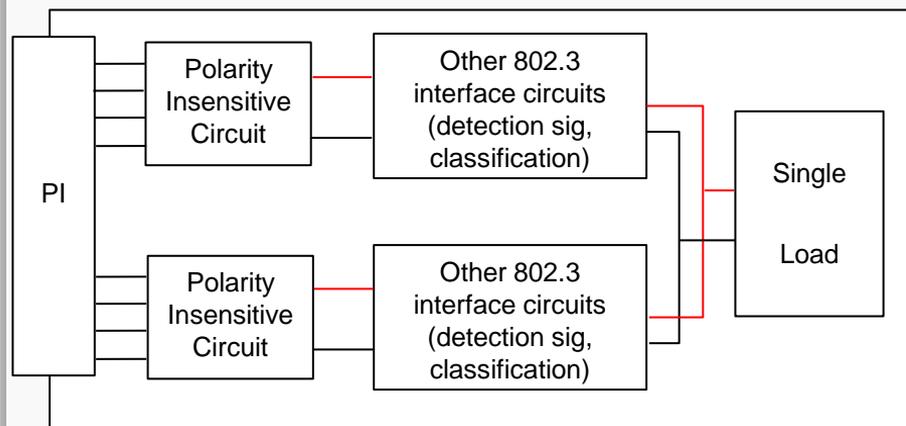
## Single signature with single load PD



## Dual signature with Dual load PD



## Different class in Dual signature PD



Refer to darshan\_05\_0615\_rev006:

For PD: If a Dual Signature, single load PD is using different class codes it will likely violate the current limit of one of its pair sets and [get disconnected](#).

For PSE: PSEs that don't want to deal with different class codes can [take the larger class of the two pair sets and apply that for each pair set](#).

For PD: If a Dual Signature, dual load PD is using different class codes it works well if PSE supports.

For PSE: PSEs that don't want to deal with different class codes can [take the larger class of the two pair sets and apply that for each pair set](#).

PSE Operation:

If PSEs don't want to support different class in dual sig with single load PD, it should take the larger class of the two pair sets and apply that for each pair set.

# PSE Options for dual signature PD

- Option I:

**Without distinguishing single/dual load, PSE shall take the larger class of the two pair sets and apply that for each pair set if it wants to support dual signature PD.**

- Option II:

**With distinguishing single/dual load information, PSE can work separately on each pair-set with dual load if it wants.**

- Option III:

Dual signature PD shall have dual loads. Then Connection check can be used to distinguish load as well.

- Option IV:

Single load dual-signature PD is required to use the same class signature on each pair-set.

Thank you!