Laboratoire d'Annecy-le-Vieux
de Physique des Particules

CONTROL BOARD

Timing and ECS upgrade for LHCb ECAL Crate

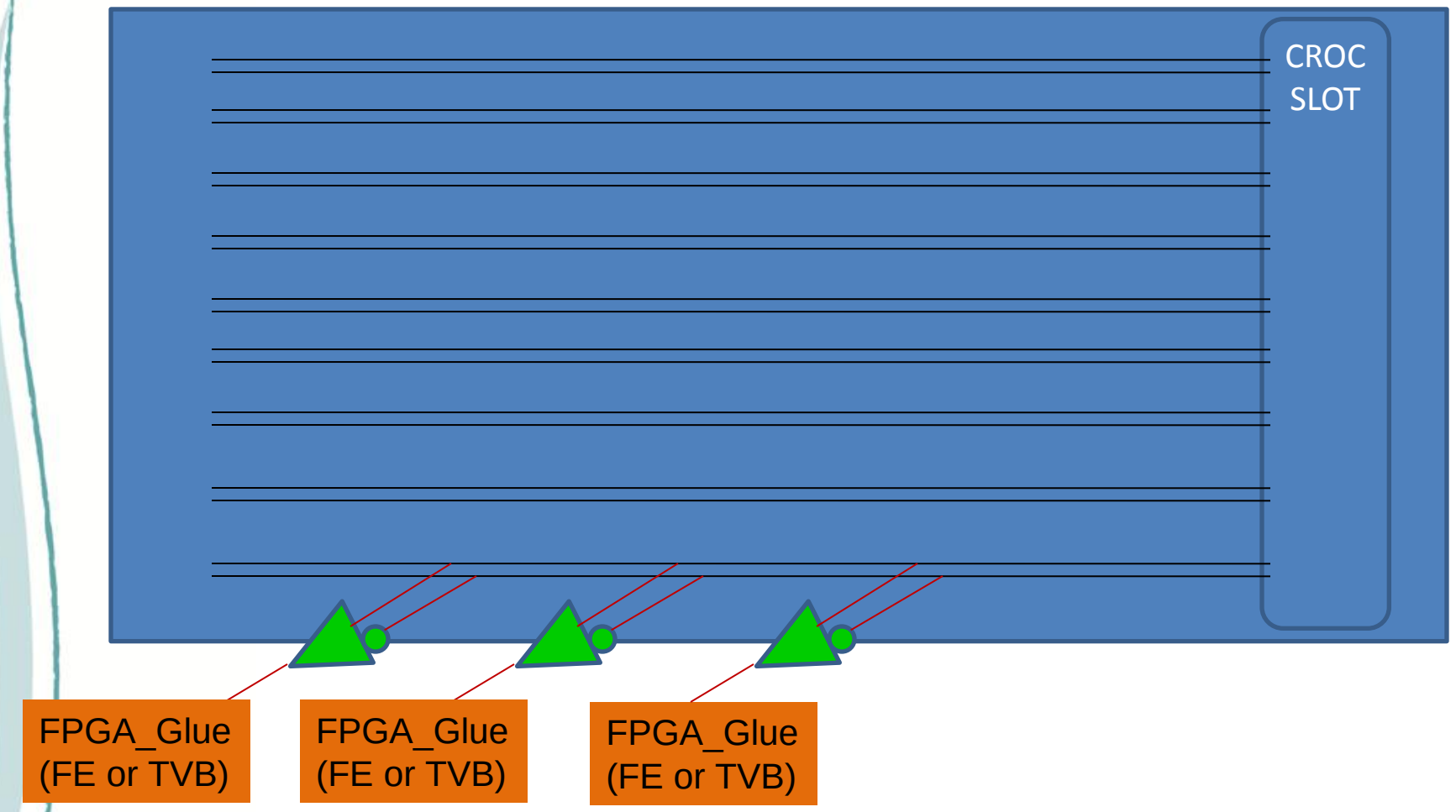
Cyril Drancourt

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE
IN2P3 INSTITUT NATIONAL DE PHYSIQUE NUCLÉAIRE ET DE PHYSIQUE DES PARTICULES
UNIVERSITE CHAMBERY SAVOIE

ECAL Crate

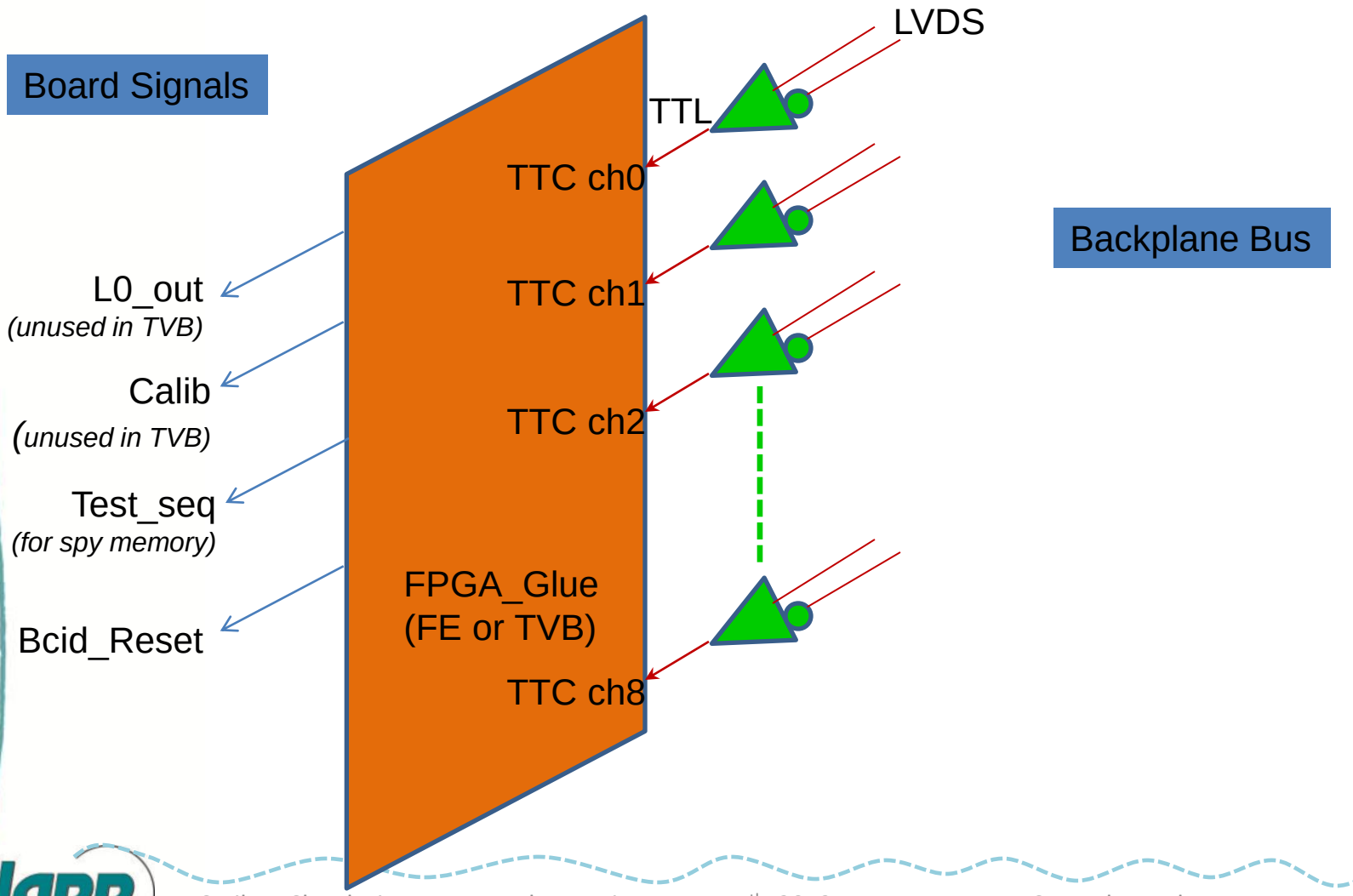
Current backplane bus

TTC bus : 9 LVDs Line - CROC to all board (FE or TVB) -

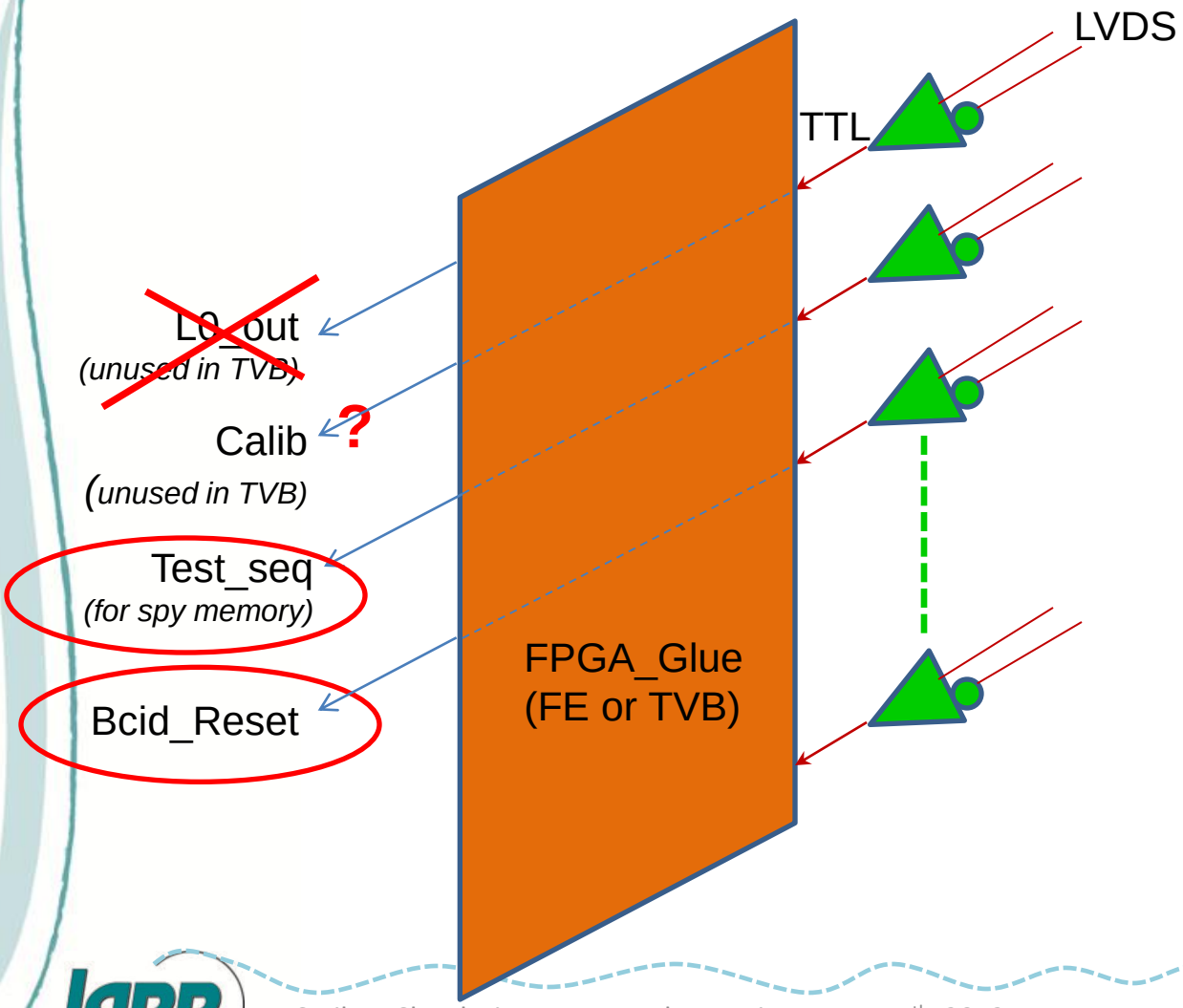


Current backplane bus

TTC bus : 9 LVDs Line - CROC to all board (FE or TVB) -



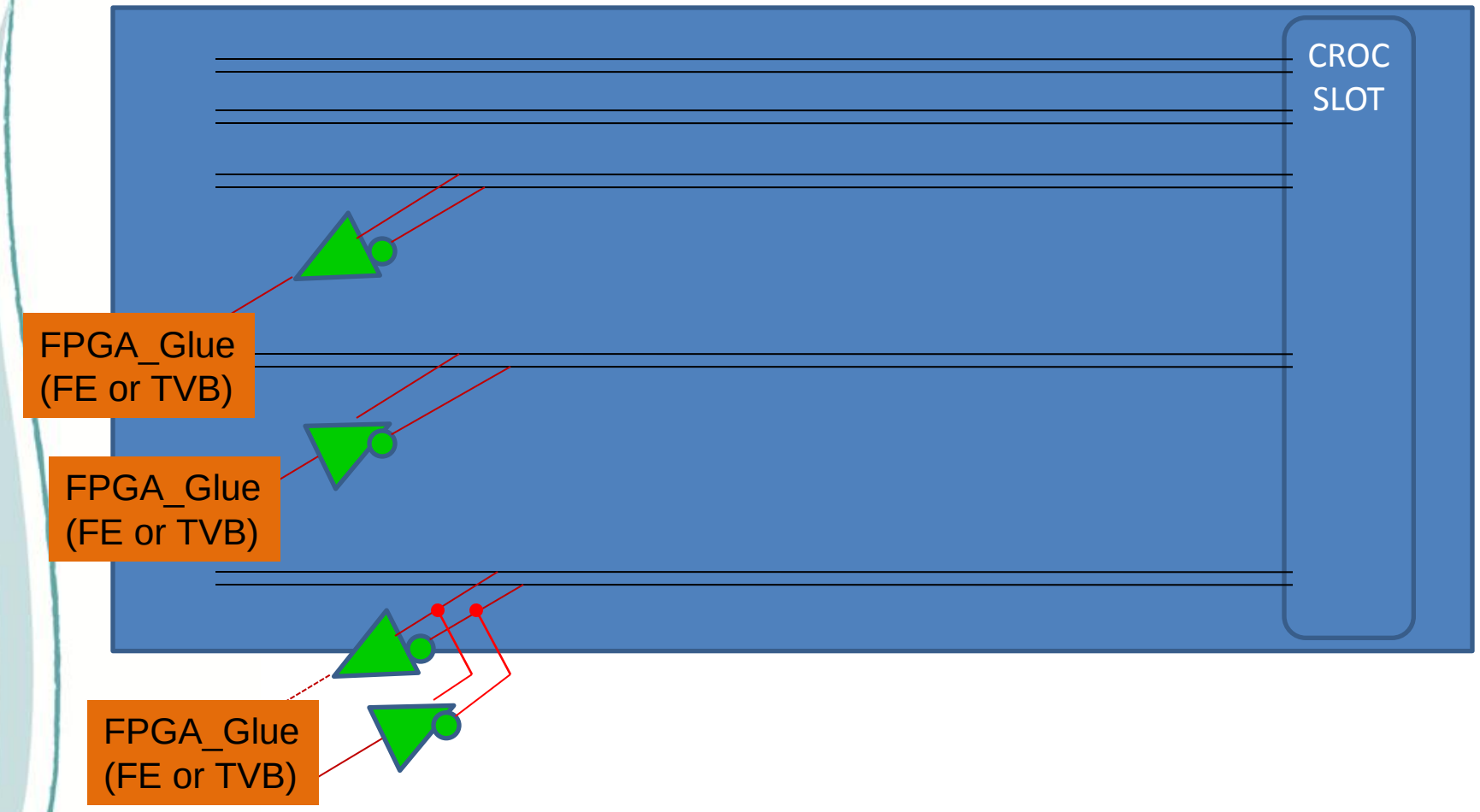
Needs for Upgrade



ECAL Crate

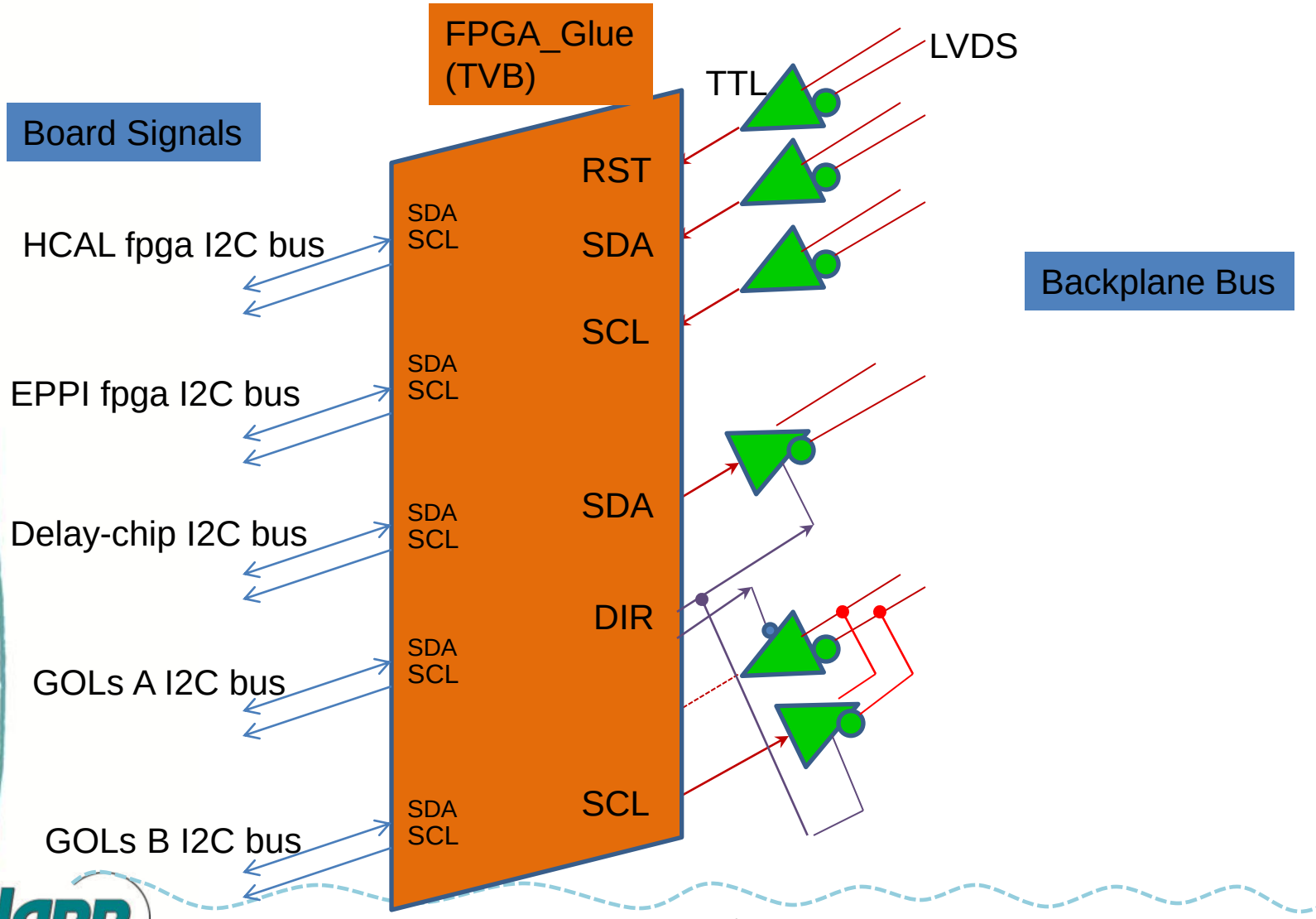
Current backplane bus

SPECS bus :5 LVDs Line - 3 CROC-out, 1 CROC-in, 1 CROCinout -

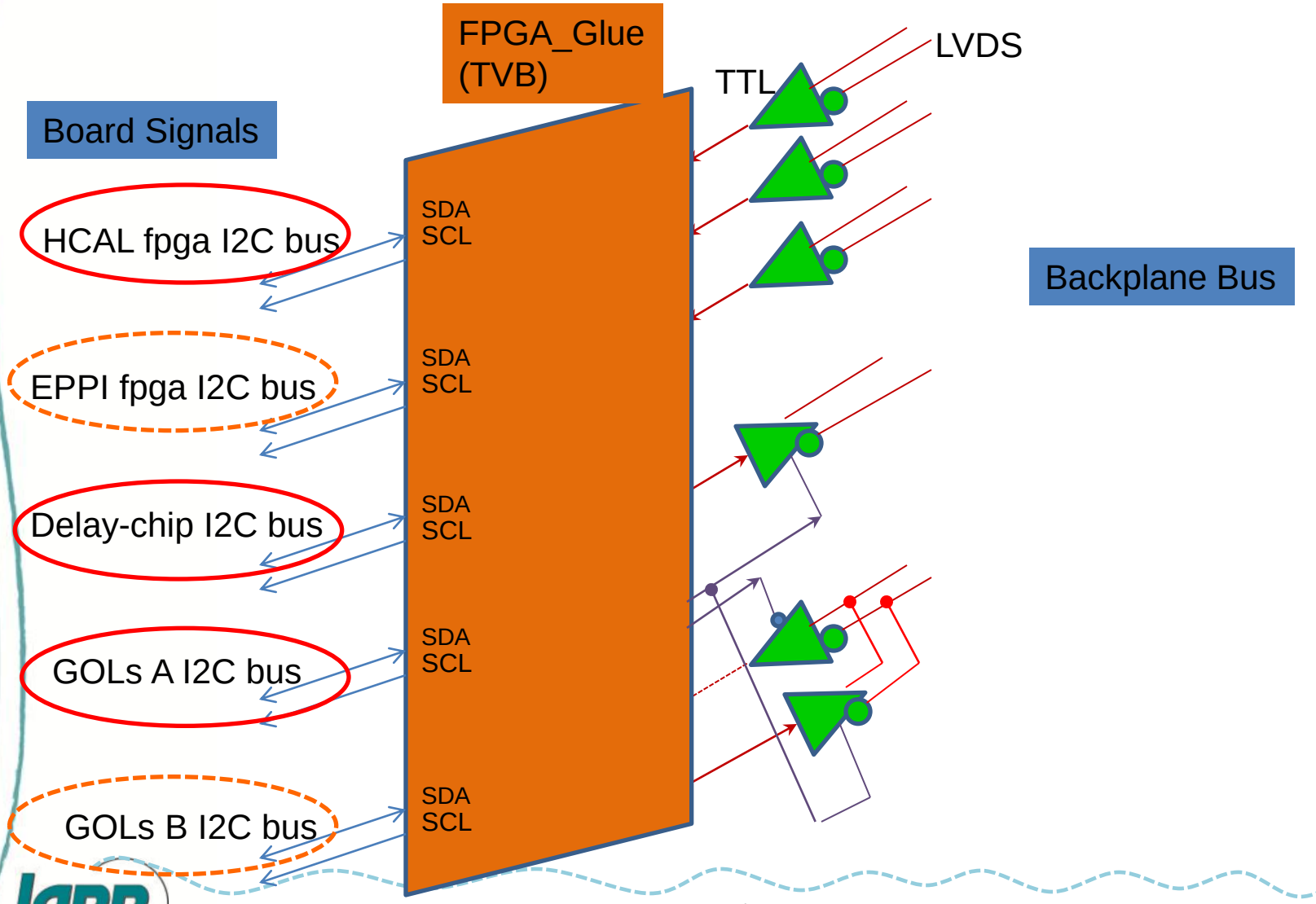


Current TVB used

SPECS bus :5 LVDs Line - 3 CROC-out, 1 CROC-in, 1 CROCinout -



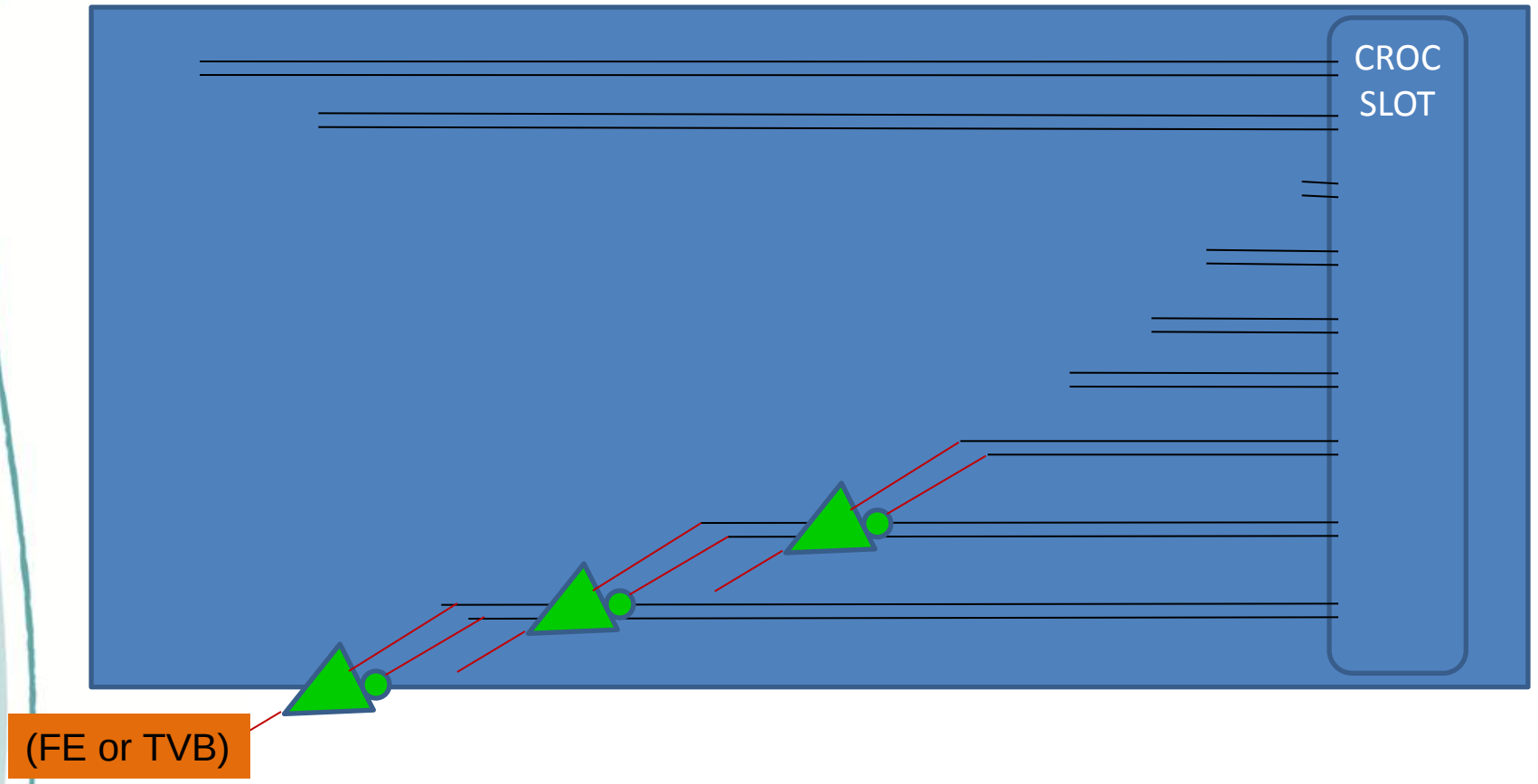
Needs for Upgrade



ECAL Crate

Current backplane clock

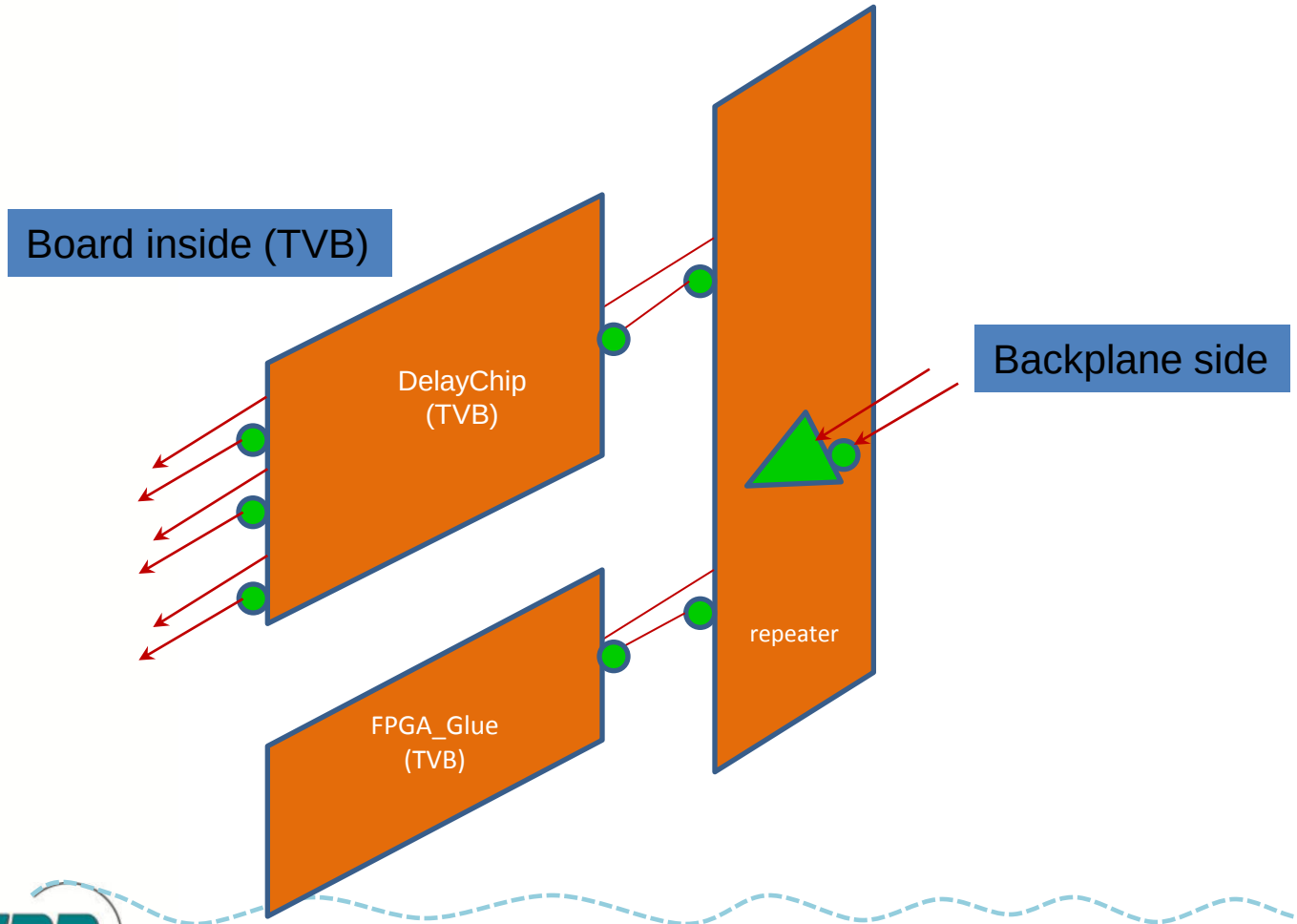
1 LVDS Point to Point- CROC to each board (FE or TVB) -



Current TVB clock

1 LVDS Point to Point- CROC to each board (FE or TVB) -

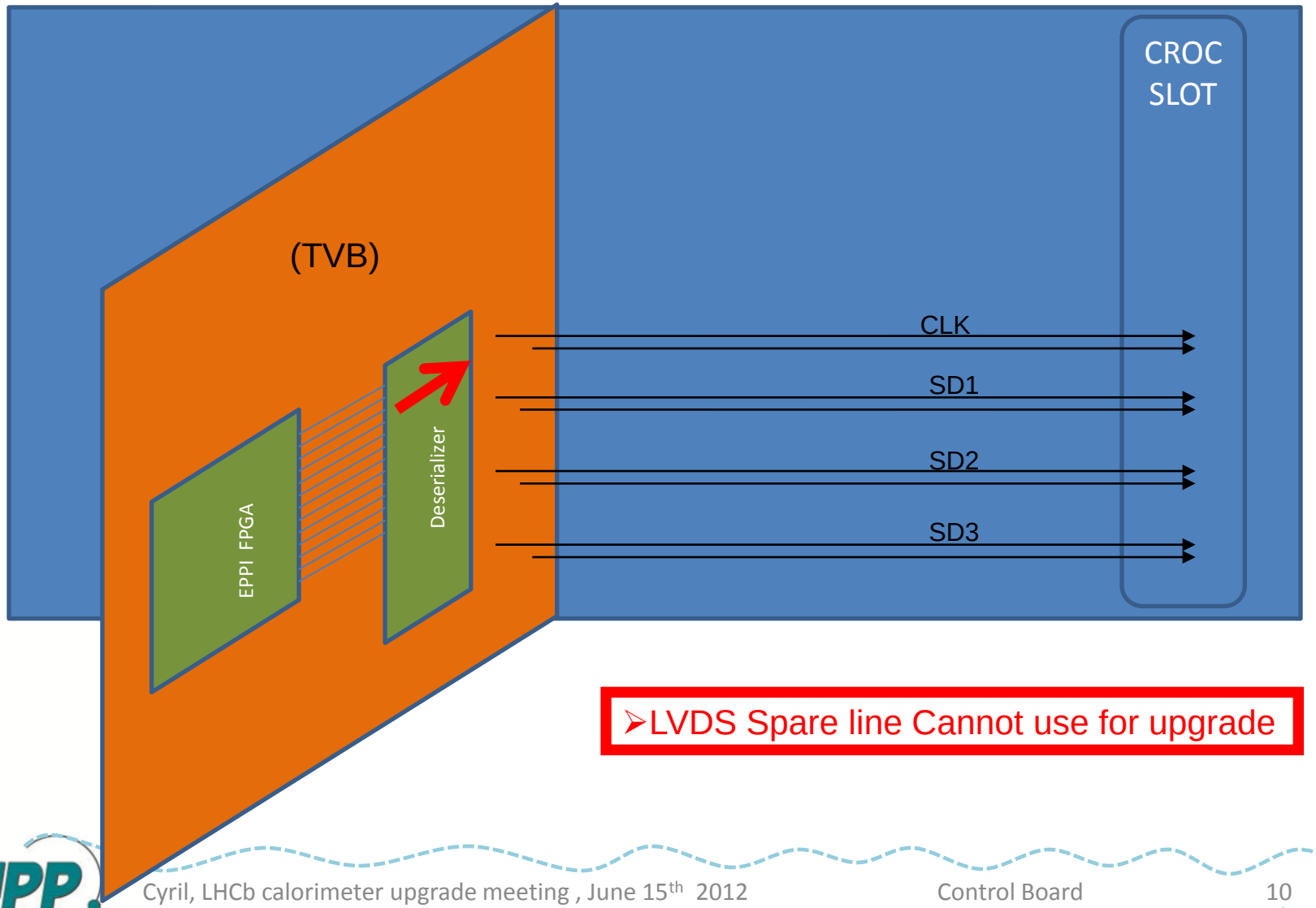
➢ Need to keep for upgrade



ECAL Crate

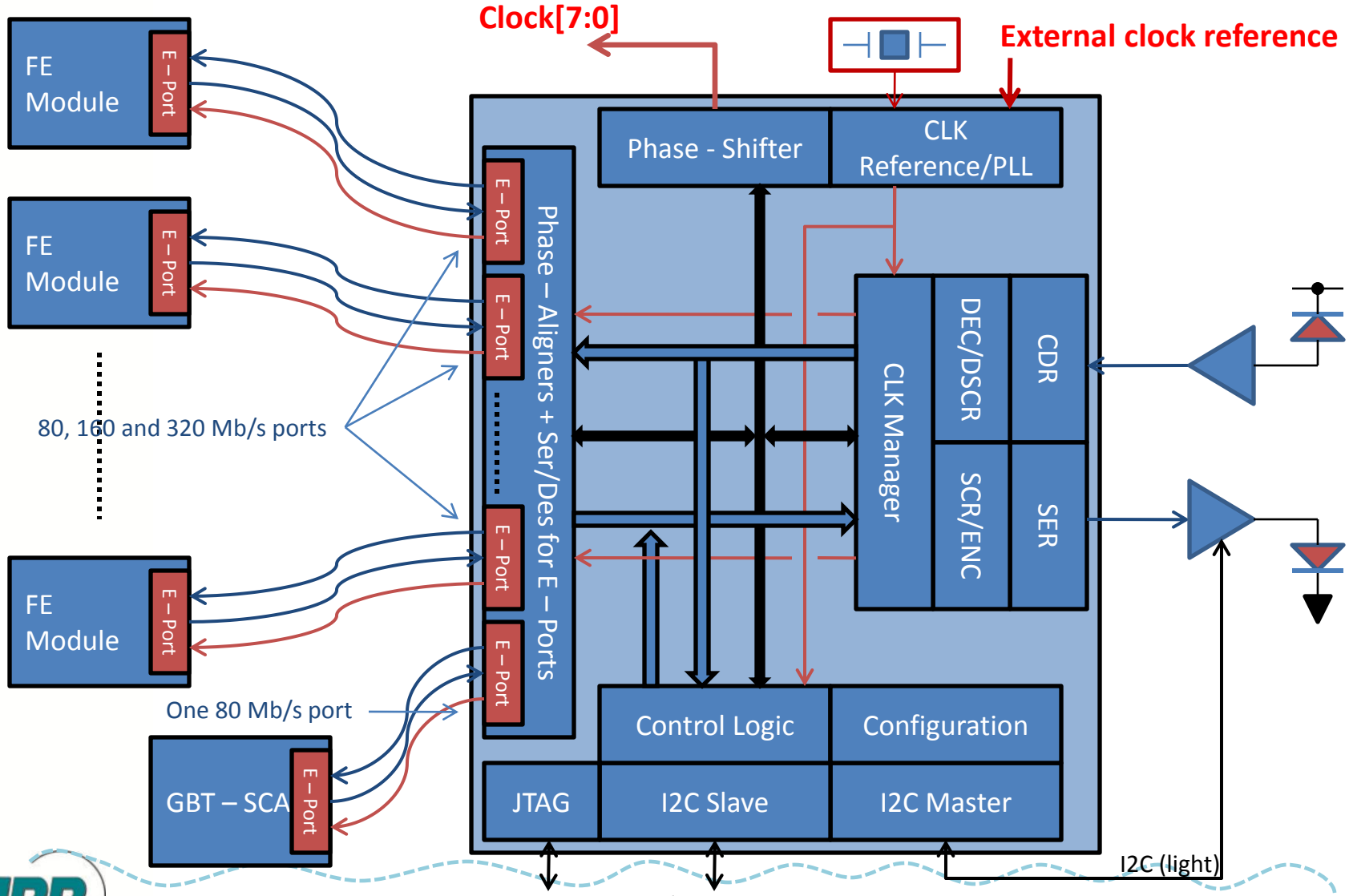
Current backplane Spare

4 LVDS Point to Point- CROC to each TVB -

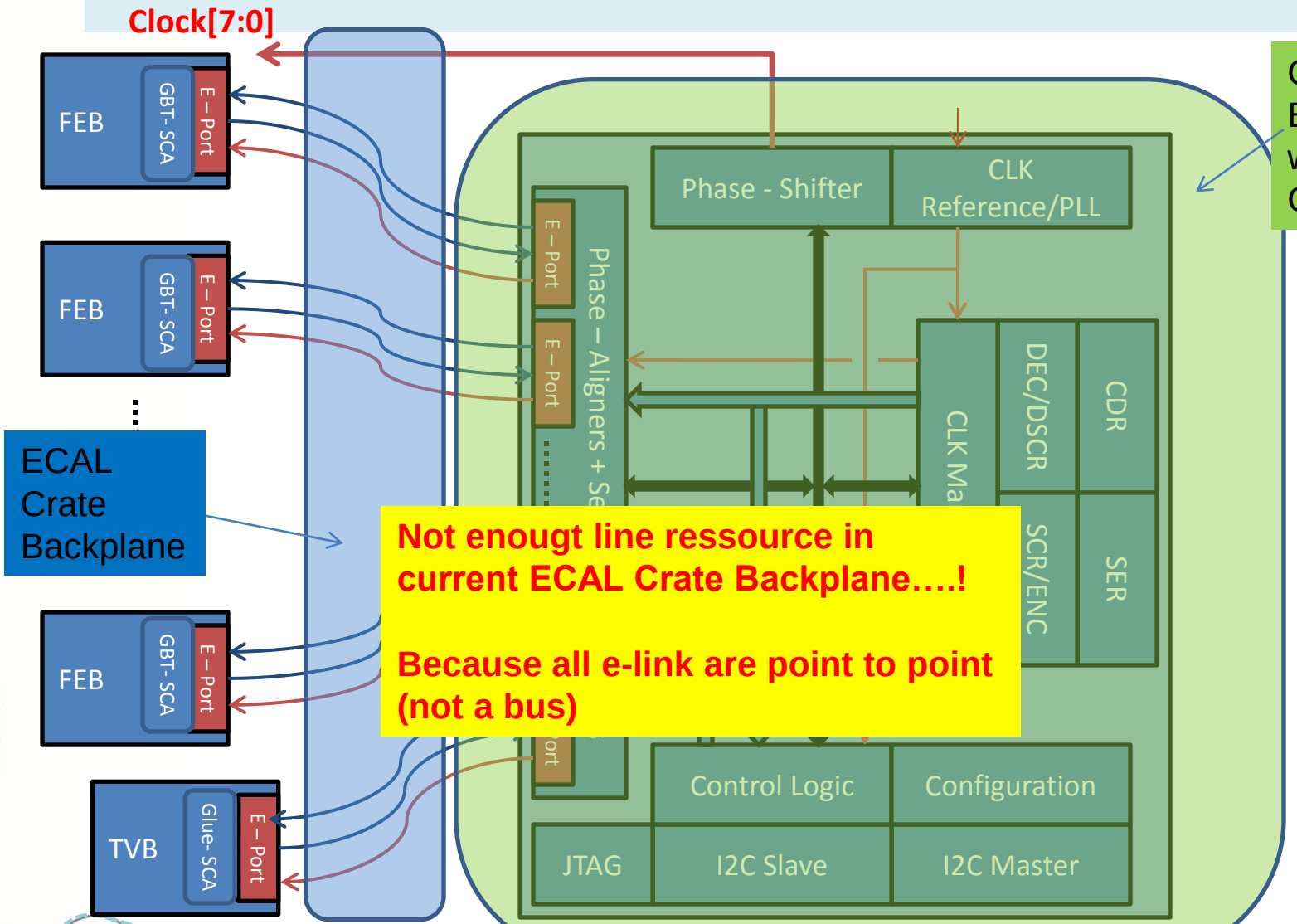


➢LVDS Spare line Cannot use for upgrade

TFC+ECSInterface to FE
GBT link for upgrade



TFC+ECSInterface to FE
ECAL crate application



TFC+ECSInterface to FE
ECAL crate application