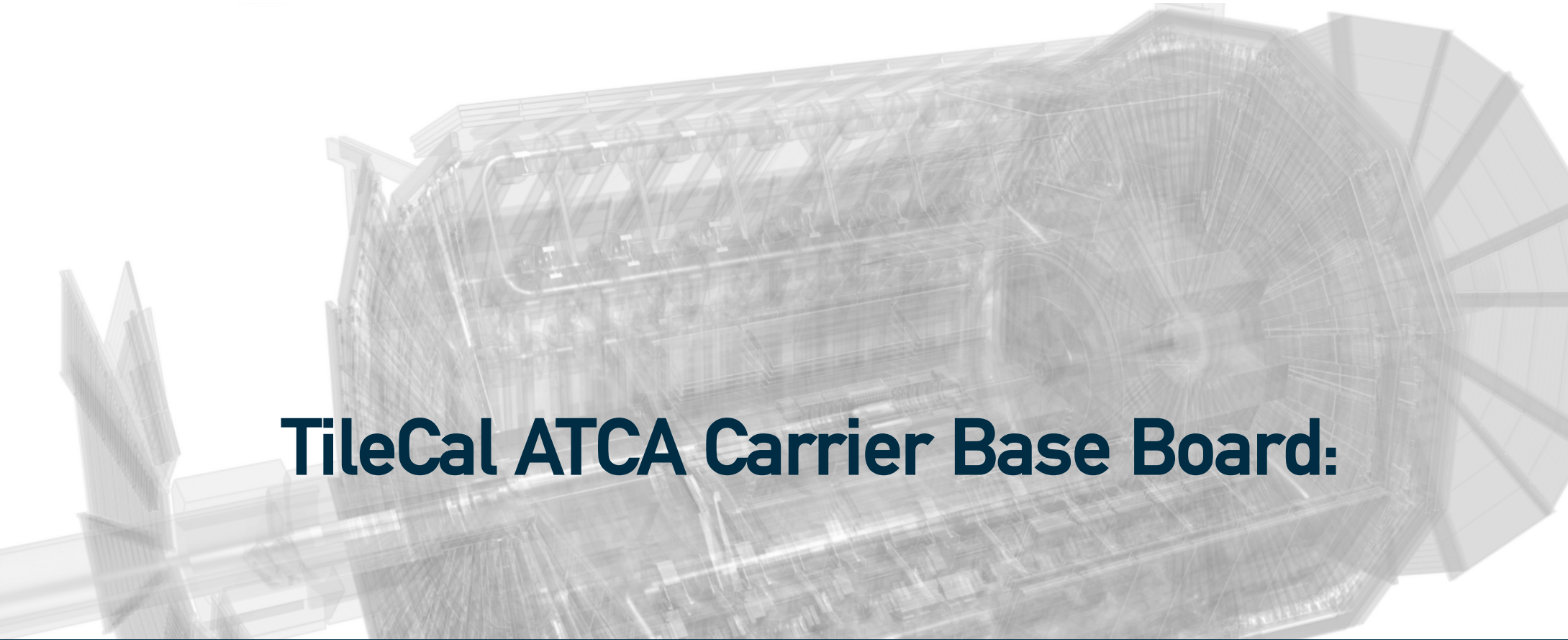




TileCal ATCA Carrier Base Board:

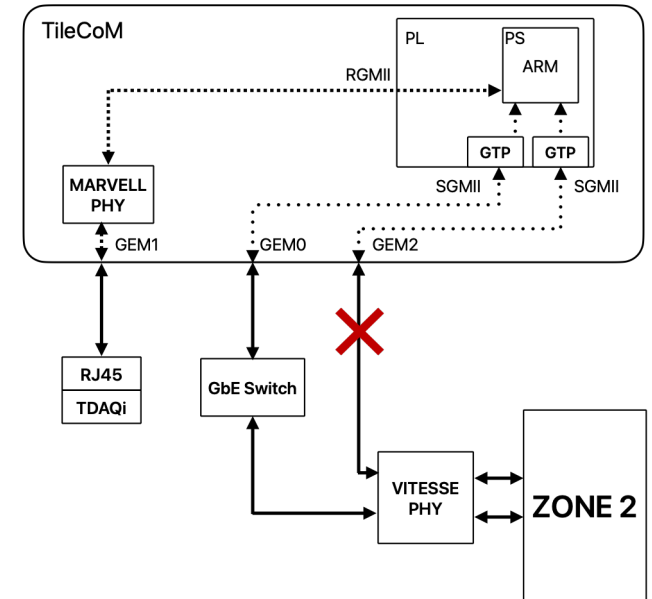
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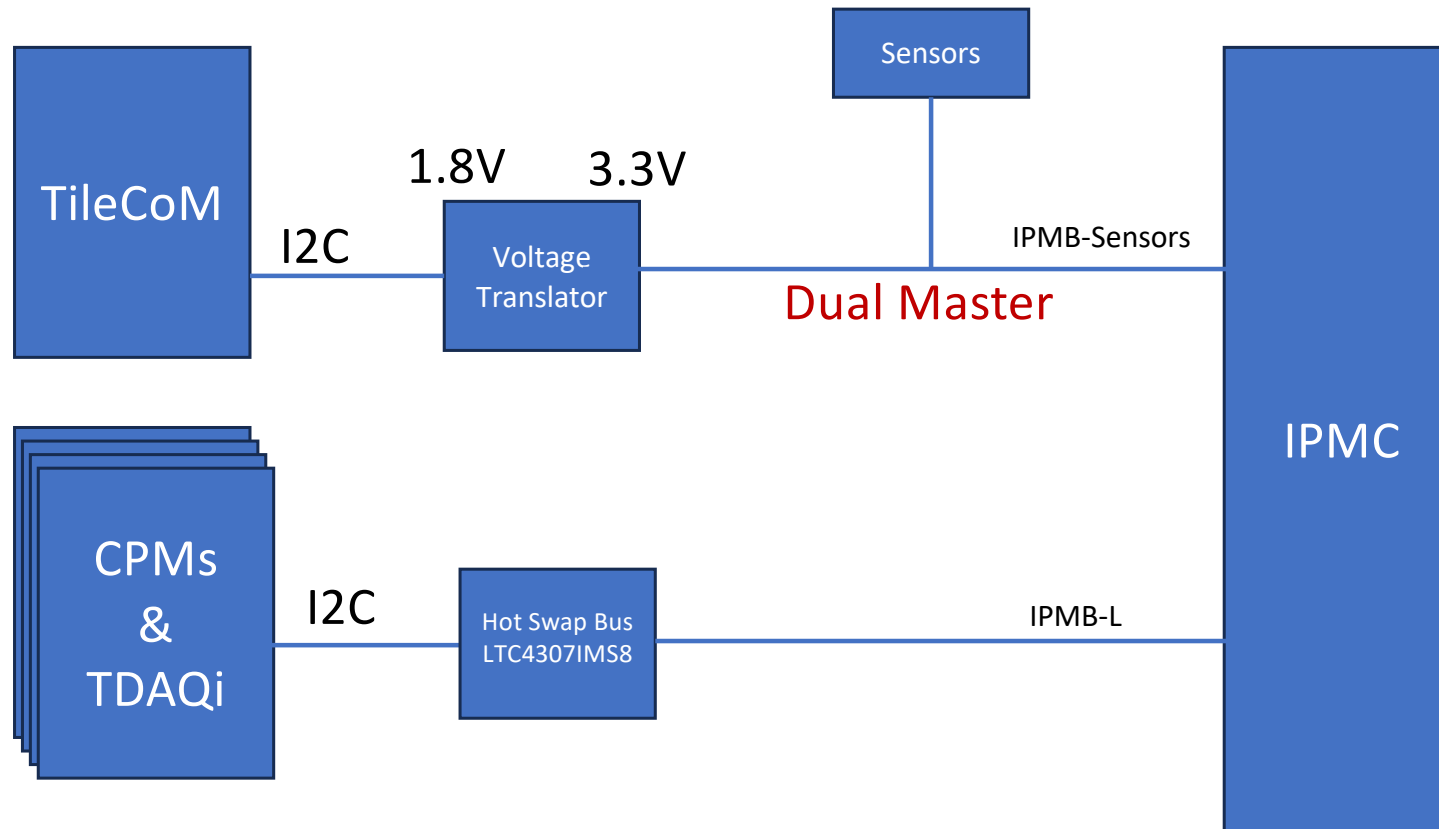


Design updates for production

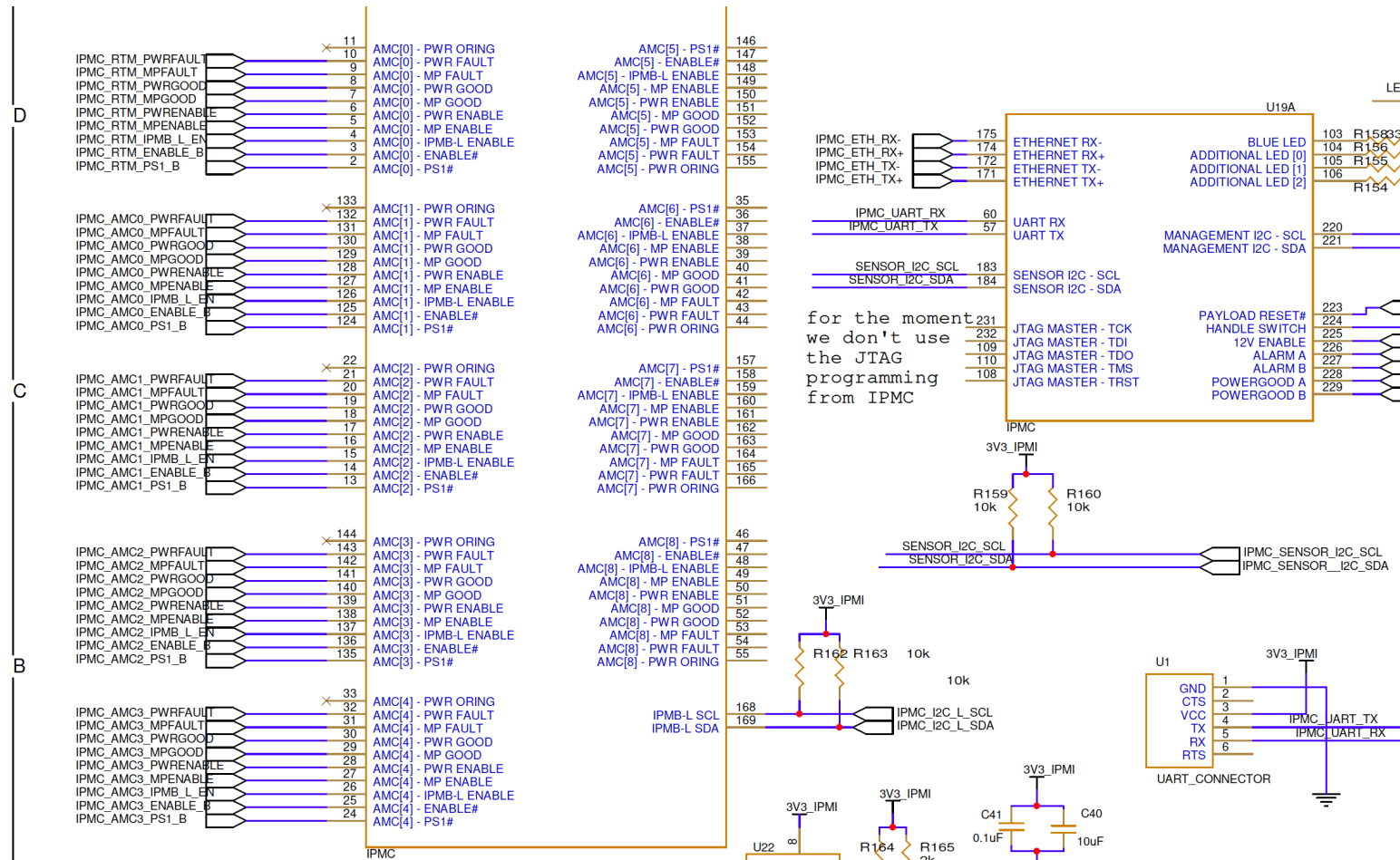
- V2.3 : Presented at the FDR – PreProduction version
- V2.4 : Production version with 3 minor modifications
 - The TileCoM was not fully working. Integration tests into the ACBB to be done
 - One GbE port was not correctly connected in the ACBB
 - RJ45 (ACBB or TDAQi) → TileCoM
 - Zone2 → GbE Switch → TileCoM
 - Zone2 → TileCoM tested with patch
 - Solution: remap the connection in the TileCoM connector. Tested with a patch
 - Assembly company noticed a problem with DAMM in some components
 - Required extra time to manual solder these components – no operational problems
 - Solder mask removed when distance between pins < 80 um (black color)
 - Reduced to 60 um using green color
 - Solution: equalize the distance between pins and use green color
 - We have connected the TileCoM and IPMC UART to Zone 2 connector – extra function
 - Currently only possible from two connector in the PCB (not accessible from front-panel)
 - Eventually will allow the remote connection from a HUB node
 - Recommendation to remove the dual master in I2C for sensors reading
 - Suggestion was to read the sensors from one of them and then transfer to the second on
 - Alternatives:
 - Semaphores
 - Use the TileCoM as a light-FRU (no power negotiation but connection to IPMB-L to send sensors values from IPMC)



Current configuration



IPMC FRU



Mezzanines

- GbES Module:

- Design is frozen. We have 10 BCM5396 chips
- Plan: Send PCBs for production (evaluate if we fabricate 10 vs 60)
- PCB production company? Assembly at IFIC

- TileCoM

- Design is frozen? Changes on sensors reading?
- We have 10 ZynqU FPGAs
- Plan: finish layout. Send PCB for production. Company?
- Assembly in ProDesign?