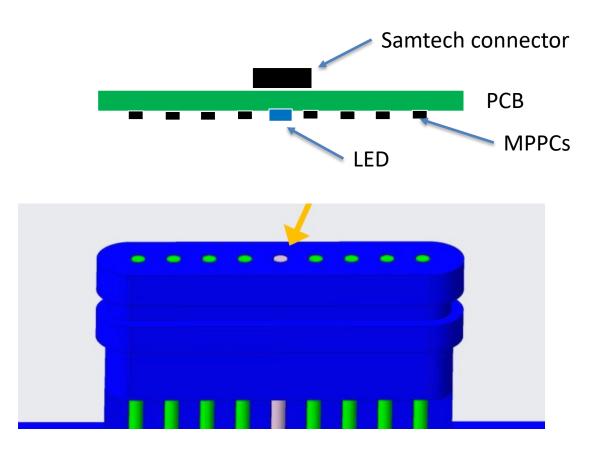
MPPC to WLS fiber Connector

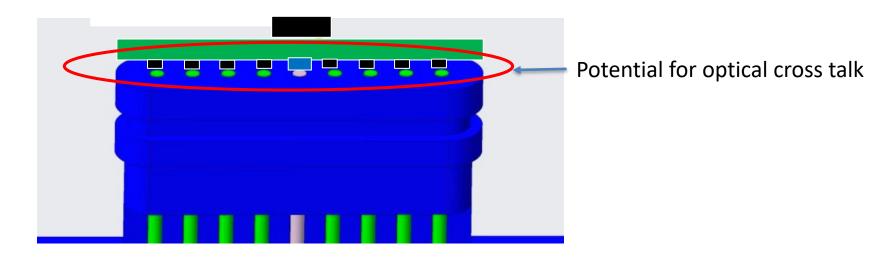
Thomas Kutter, LSU

Aug 23, 2024 TMS Engineering Meeting

MPPC to WLS Fiber Interface

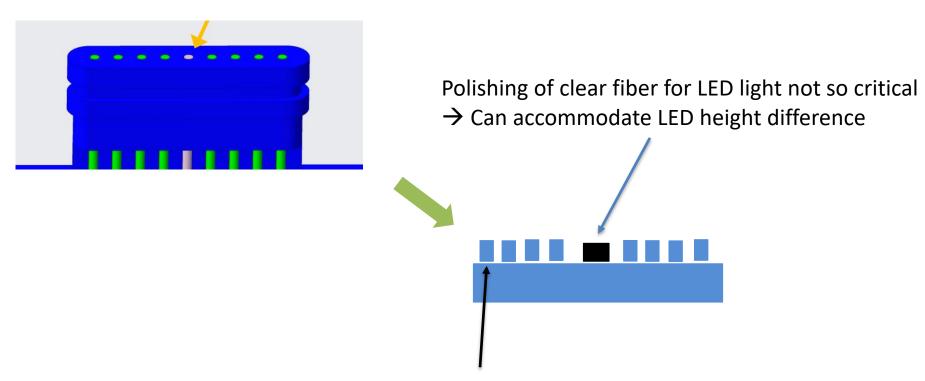


Flat MPPC to WLS Fiber Interface



- Height mismatch between MPPC and LED likely
 → leads to poor coupling between MPPCs and WLS-fiber
- Potential for direct light injection from LED into MPPC
 → bypassing crucial check of fiber to MPPC interface

MPPC to WLS Fiber Interface

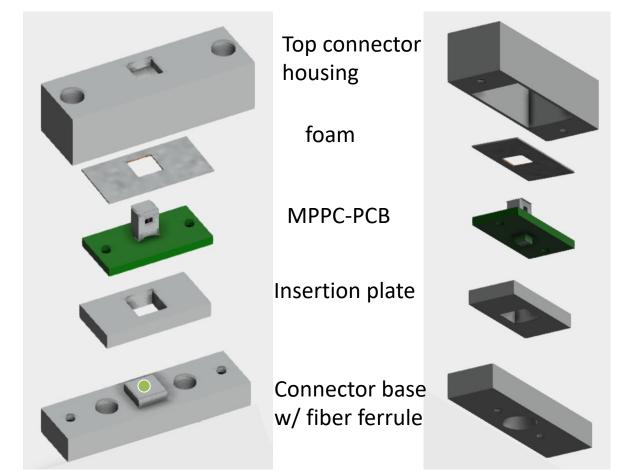


Individual ferrule stubs allow to eliminate/reduce optical cross talk

Modified MPPC to WLS Fiber Interface

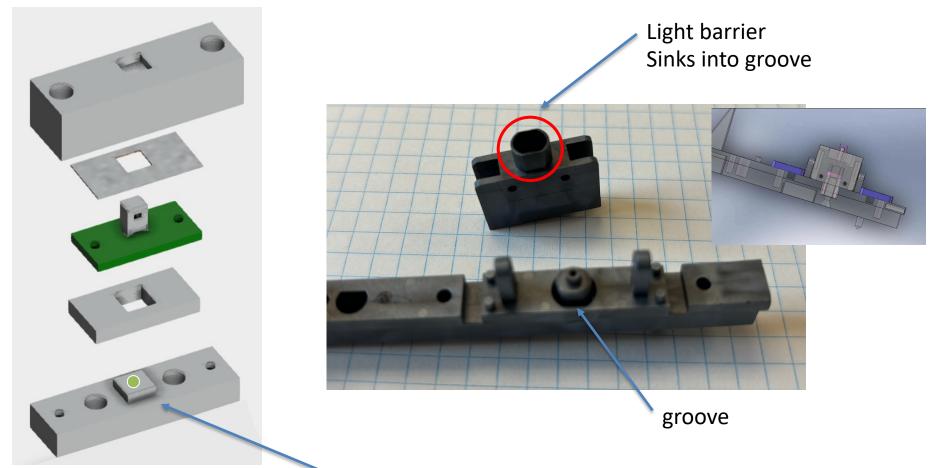


Individual ferrule stubs allow to eliminate/reduce optical cross talk



Shown is single channel connector w/o LED light injection Concept can be expanded to 8 channels w/ LED

Modified MPPC to WLS Fiber Interface



Option of adding groove around ferrule and matching light barrier on insertion plate