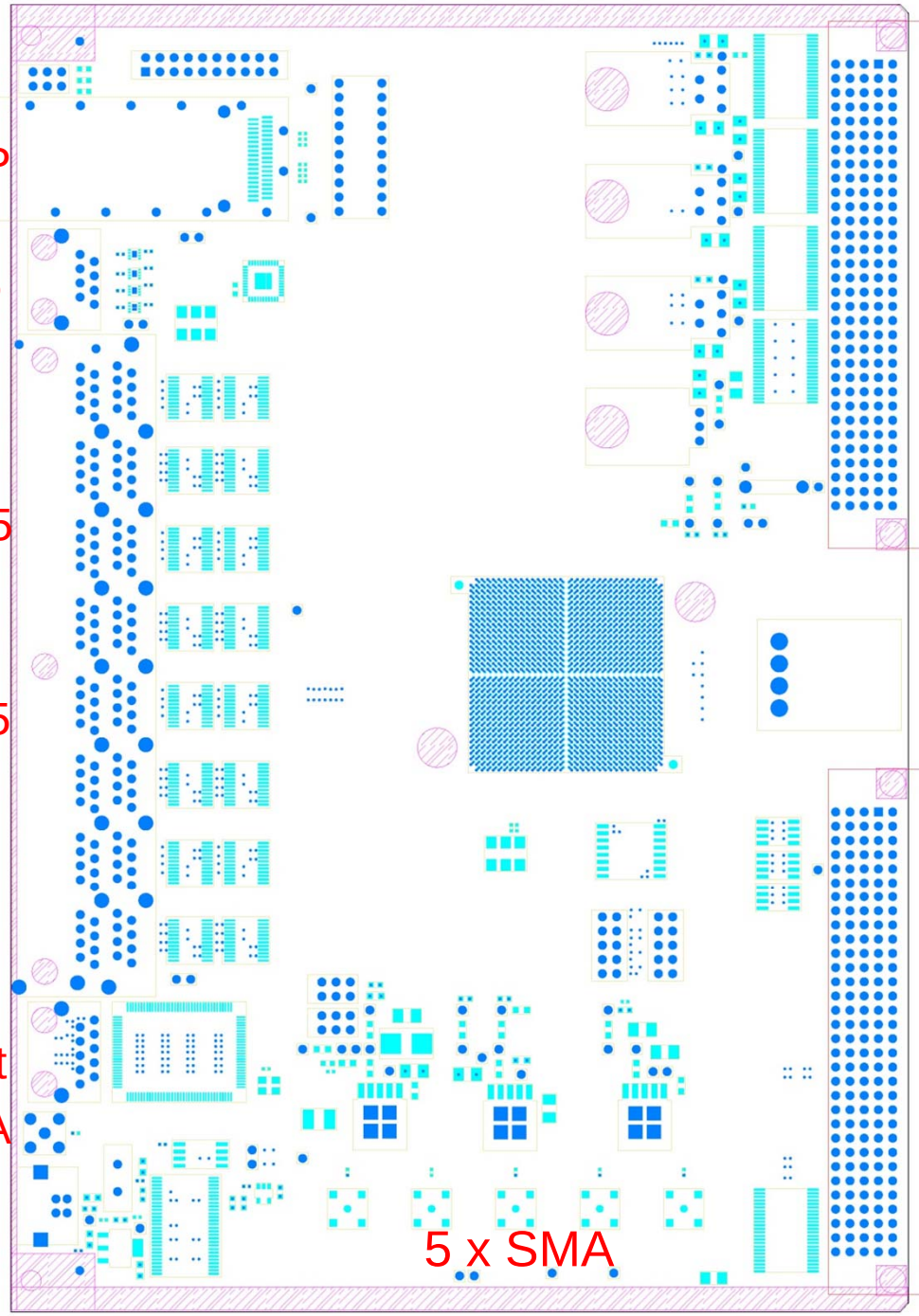
Annie’s Central Card

Status Report - 9/18/2015

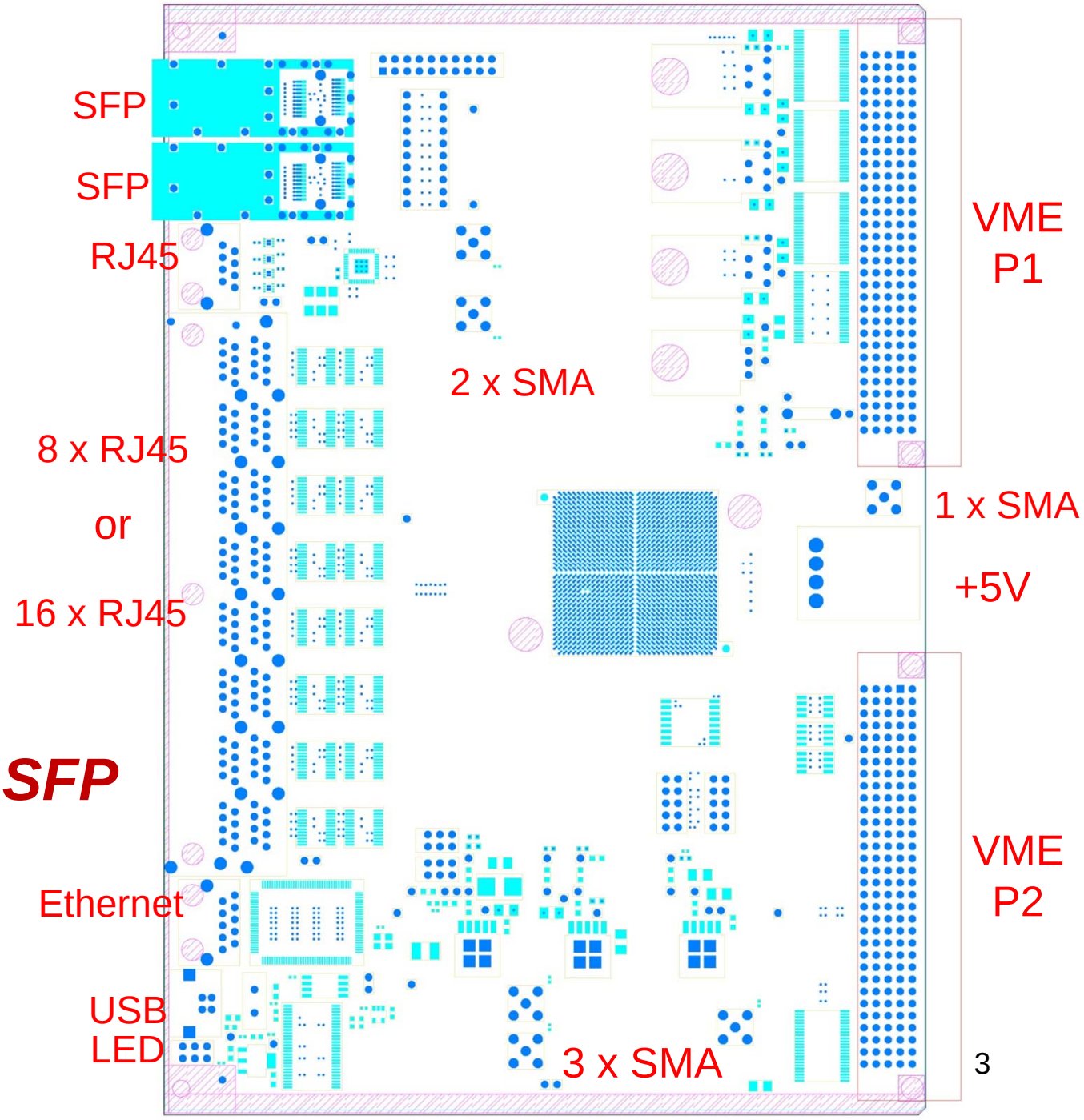
The University of Chicago

ACC Specs
Old



6U VME Format
Can work as Stand Alone

ACC Specs

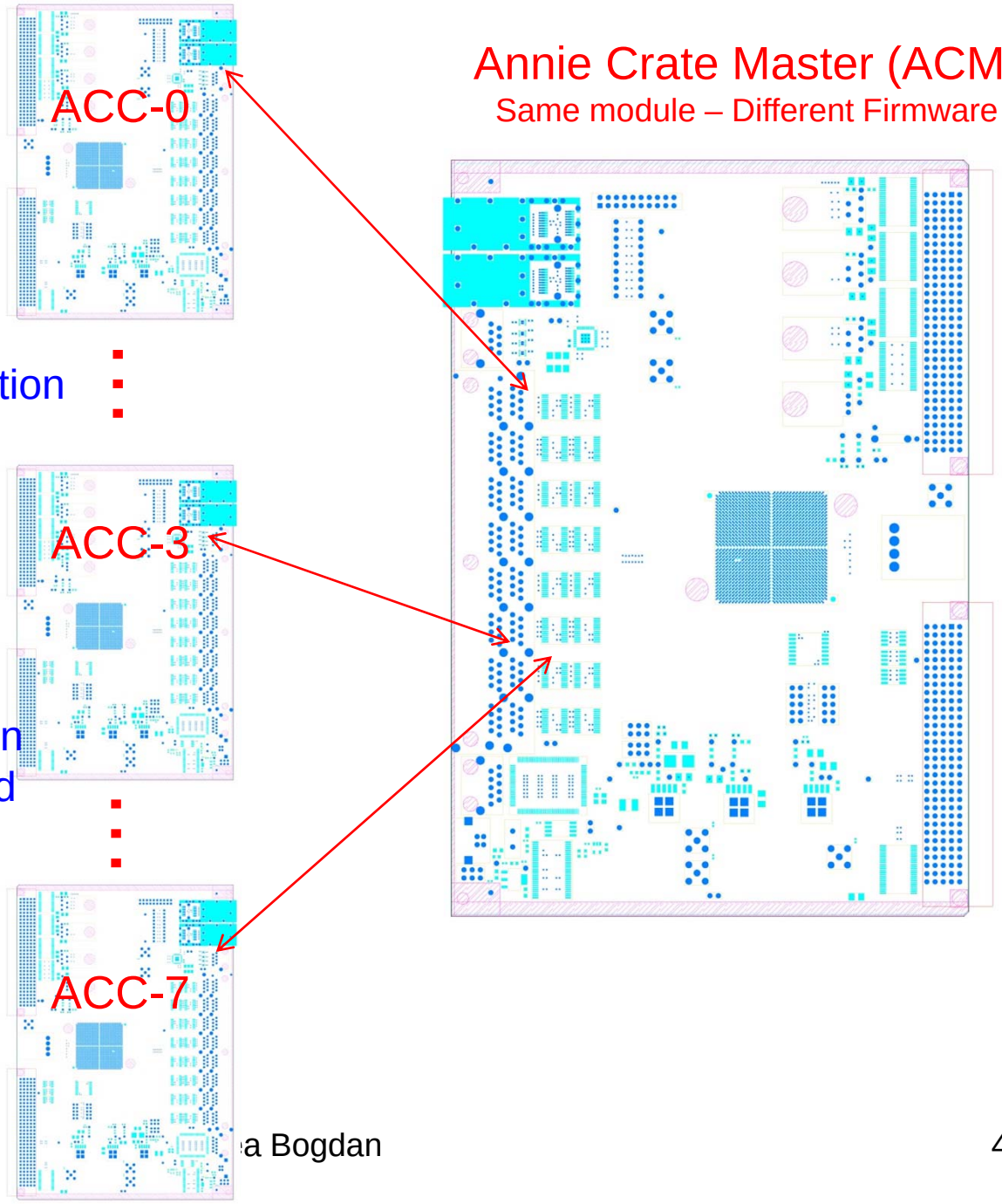


Change:

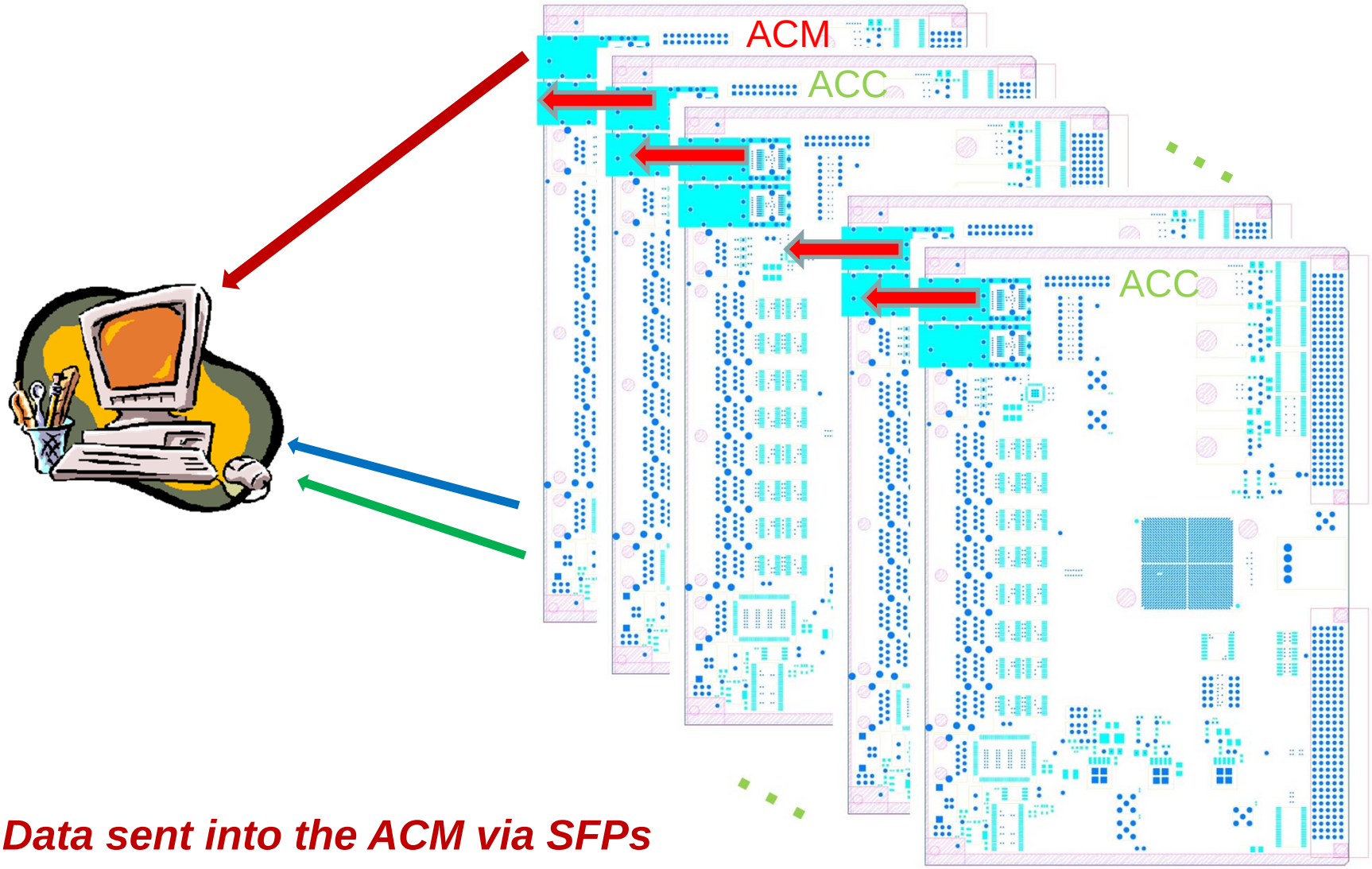
1 x QSFP -> 2 x SFP

System Architecture

- Clock and Trigger Generation and Distribution stay the same (RJ45-LVDS).
- Double Width ACM can service 8 ACCs.
- System can be extended in multiples of 8, in a pyramid scheme.



ACC- System Readout: Crate with 1 ACM and 8 ACCs



- Data sent into the ACM via SFPs

- ACM Readout via: SFP, CAT5, USB or VME

ACC - situation and plans

Proposed Readout Solution:

- Replace the Font Panel QSFP with two SFPs; VME is left as originally presented (32-BIT, no CBLT, no interrupts, etc.)

- Data collected into Crate Master(ACM) via daisy chained SFPs
- Max Rate inside chain: 6Gbps
- Data Processing/Reduction possible inside ACM
- Final Data readout only from ACM (SFP, CAT5, USB or VME)

Note:

- *The same readout method (daisy chaining of SFPs) can be used for the KOTO-style 500MHz ADCs, with data collected into the KOTO MT Module.*