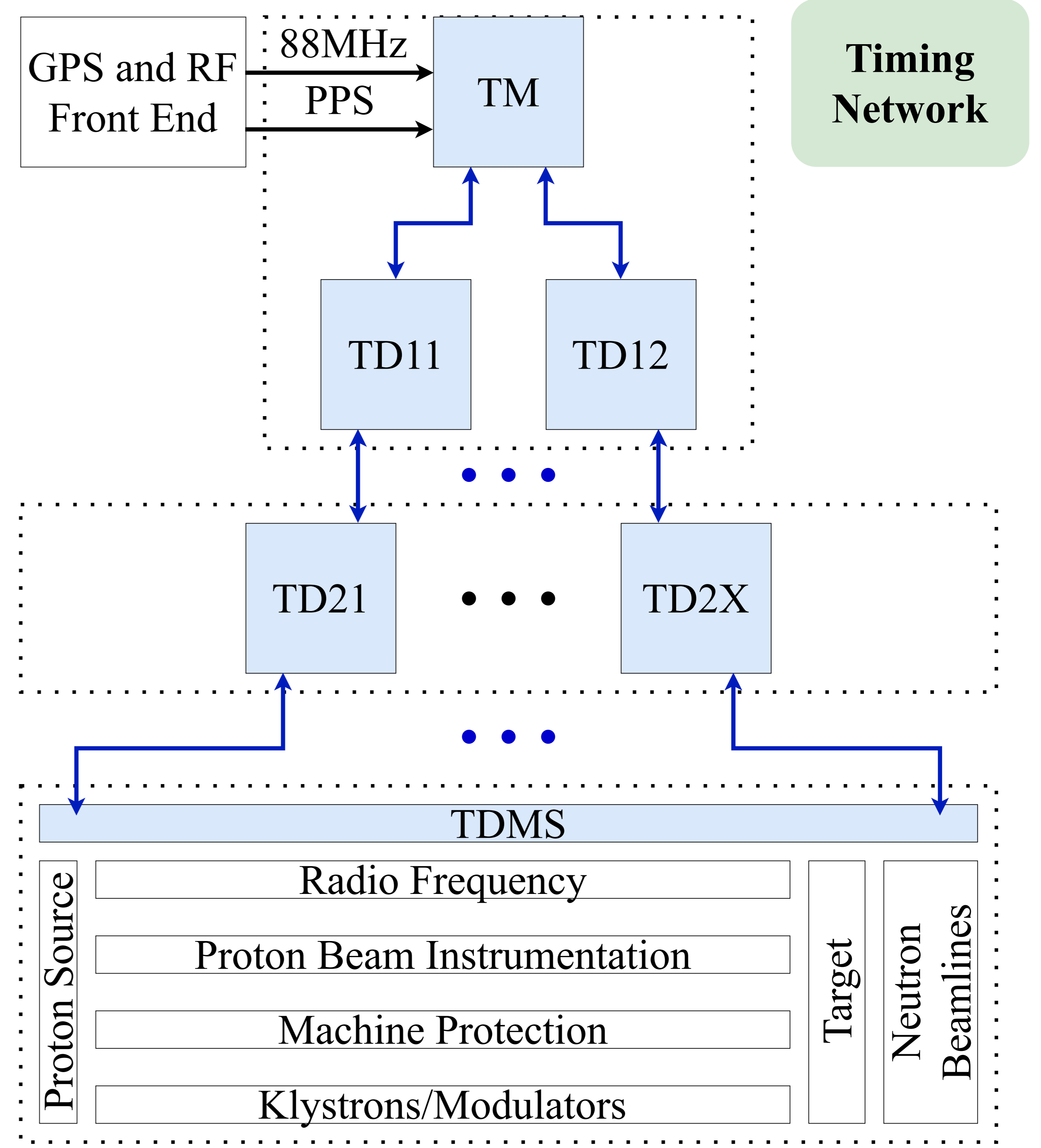
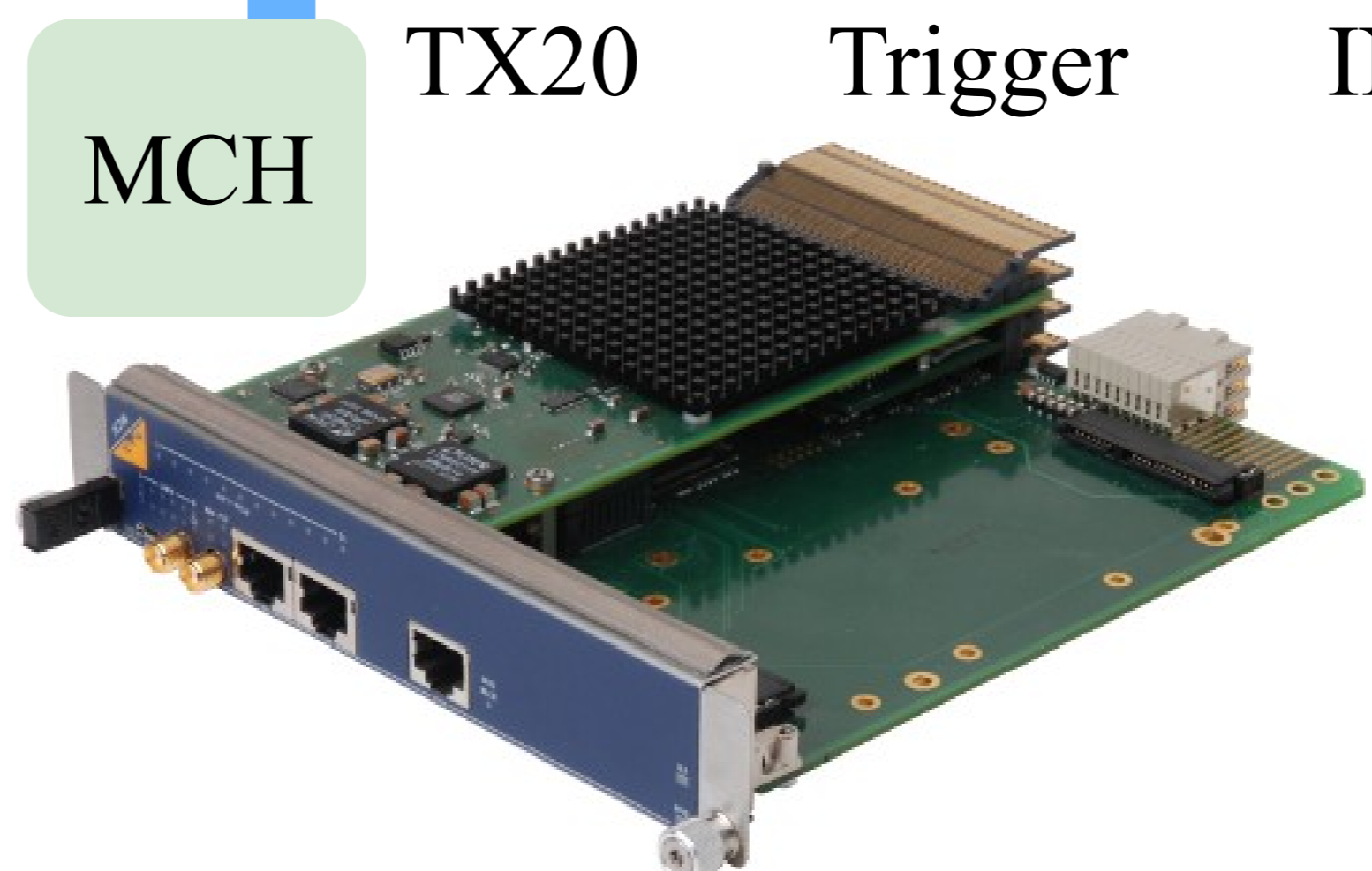
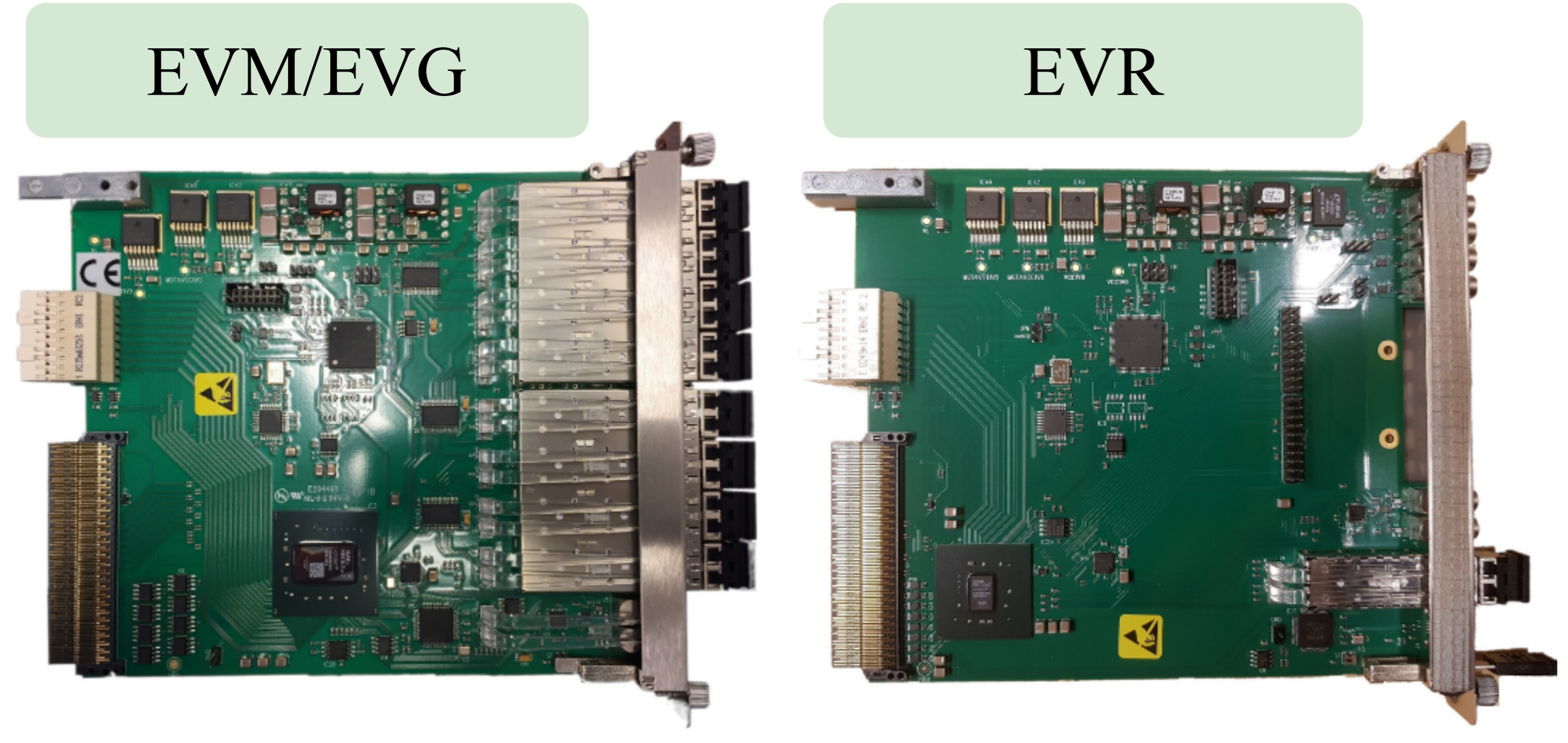
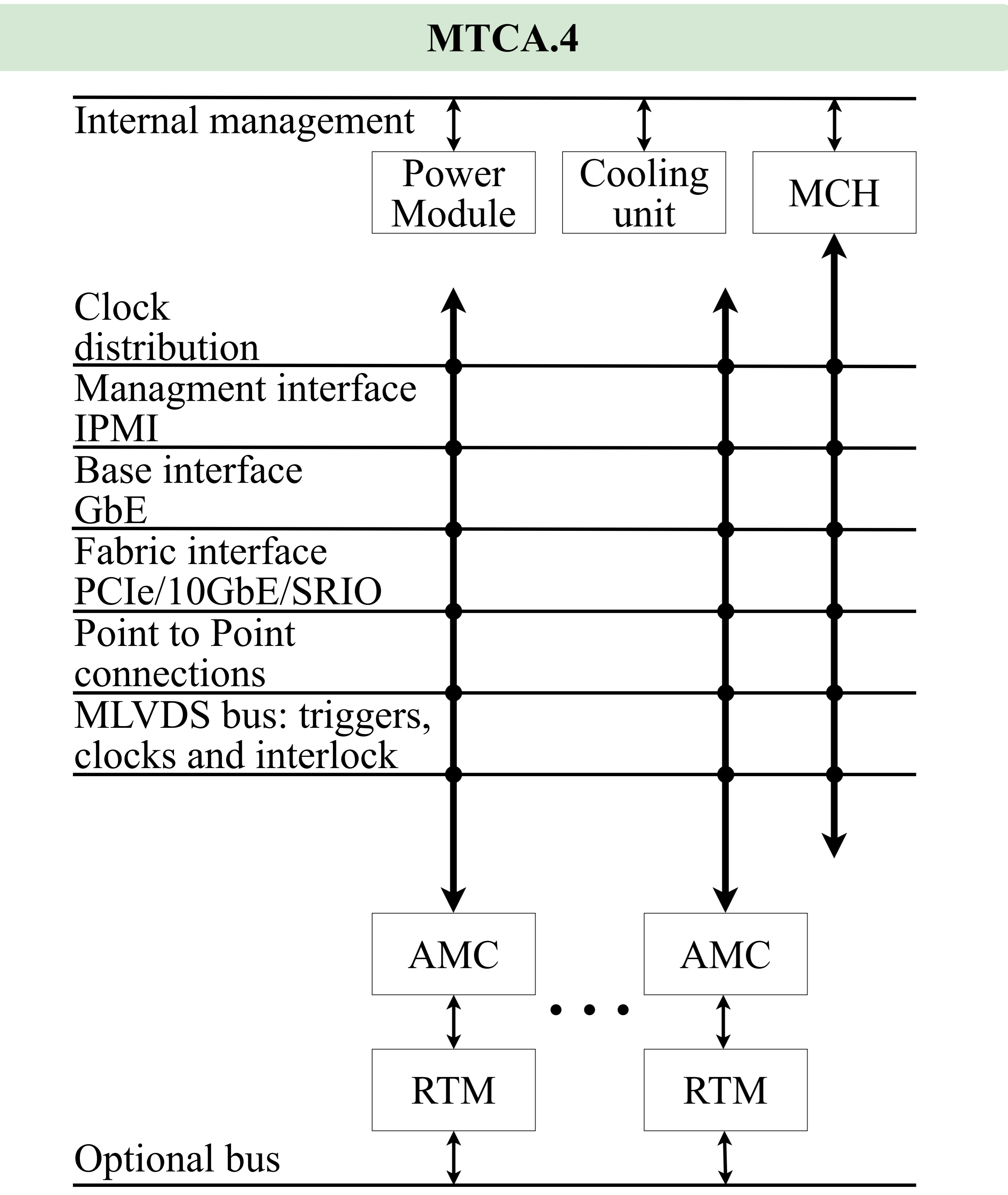




- ESS**
- * Size: 750x250m
 - * Target: tungsten, 36 sectors @ 23 1/3rpm, 11tonnes
 - * 5MW (125MW peak), 2GeV, 62.5mA, 2.86ms@14Hz
 - * 352.21MHz up to 216MeV; 704.42MHz up to 2GeV
 - * NCL:~50m up to 90MeV; SCL:~550m up to 2GeV@2K
 - * Operation availability: 95%



TDMS - MTCA MLVDS bus

Line	Function	I/O	Trigger	Frequency
TCLKA	RF CLK	OUT	N/A	88MHz@RF
TCLKB	RF CLK	OUT	N/A	-
RX17	Trigger	OUT	14HZ	14Hz@RF
TX17	Trigger	OUT	BPULSE_CM	<=14Hz@RF
RX18	Trigger	OUT	BPULSE	<=14Hz@RF
TX18	Trigger	OUT	PPS	1Hz@GPS
RX19	Trigger	OUT	PMORTEM	Asynchronous
TX19	Trigger	IN	PMORTEMI	Asynchronous
RX20	Trigger	OUT	DOD	Asynchronous
TX20	Trigger	IN	DODI	Asynchronous

Timing Data Buffer

Offset	Byte	Data Type
0	1	Protocol number
1	1	Reserved
2	1	Protocol version
3	1	Reserved
4	8	Linac cycle counter/ID
12	1	Beam on/off
13	1	Beam destination (last point)
14	1	Beam mode
15	1	Reserved
16	4	Beam length: float [ms]
20	4	Beam energy: float [MeV]
24	4	Beam current: float [mA]
28	1	Raster pattern: 14 beam slots
29	1	Target segment (1-36)
30	1	Reserved
31	1	Reserved

