«camBox» for SwissFEL
⇨ FPGA-implemented Image Processing Stack

Raw Camera Image

Calibration Images (BG, Flat Field)

Image Preprocessing

EPICS

- «artifact-free» image
- intensity profiles

x-Profile

y-Profile

Beam Parameters

$\widehat{X}_{CoM} / \widehat{Y}_{CoM}$

$\Delta X_{FW\%M} / \Delta Y_{FW\%M}$

$\cdots$

Data Decimation

Fast Feedback System (FFB)

Control & Monitor System (CMS)