

Mar 2021		Readout Electronics Timeline Estimate										2021			2022			2023			2024					
															FY22			FY23			FY24					
Simulation/Reconstruction	Simulation: Prototype, beam line, cosmic ray setup (CRT)																									
	Simulation: Lens characterization																									
	Simulation: Explore hpDIRC design options (e/π,π/K)																									
	Simulation: Cost/performance optimization																									
	Reconstruction: reconstruction optimization / ML																									
hpDIRC system prototype	Transfer of PANDA prototype from GSI to CUA/SBU																									
	Design and construction of CRT																									
	Initial protoype commissioning in cosmic ray setup (CRT)																									
	Upgrade of sensors and readout electronics																									
	Commissioning of upgraded prototype, CRT data analysis																									
	Optional beam test at Fermilab																									
	Beam test data analysis																									
ToT based readout	Reference readout based on MAROC3 (F/E) + SSP (DAQ)																									
	Validation of ALCOR architecture (1st production samples)																									
	Basic readout chain from ALCOR+ARCADIA developments																									
	Develop a portable DAQ system																									
	Test of streaming readout																									
	Upgraded ALCOR readout chain for dRICH																									
	Submission of a custom ALCOR design																									
	Optimize ALCOR with proper signal preconditioning																									
	Integration of SiPM readout with sensor cooling																									
	Engineering of SiPM readout and services																									
Sensors and Electronics	collaboration effort within eRD14																									
TDR																										