

Advanced LIGO Engineering Change Request (ECR)

ECR Title: ECR:

DCC No: E1200942-v1

EtherCAT chassis End 2 changed

Date: 10/19/2012

Requester:

Impacted Subsystem(s):

Daniel Sigg

ISC

Description of Proposed Change(s):

Version 2 includes the following changes:

- Remove legacy photodiodes (consequence of ECR E1200935)
- Remove ASC demodulator concentrator (consequence of ECR E1200935)
- Add up to 4 DC photodiode readbacks (required by ECR E1200938)
- Change shutter interface to 24V logic (fix incorrect interface)
- Remove flippers and temperature readbacks (required by ECR E1200930)
- Add HWS controls and TCS ring heater controls (required by ECR E1200930)

Reason for Change(s):

As part of the OAT close out several changes were made to the hardware that require an update of the slow controls interface.

Estimated Cost:

None. Only 2 chassis were initially produced to support the OAT. The changes are mostly cost neutral and the allocated money will be sufficient.

Schedule Impact Estimate:

None.

Nature of Change (check all that apply):

- Safety
- Correct Hardware
- Correct Documentation

- Improve Hardware
- Improve/clarify Documentation
- Change Interface
- Change Requirement

Importance:

- Desirable for ease of use, maintenance, safety
- Desirable for improved performance, reliability
- Essential for performance, reliability
- Essential for function
- Essential for safety

Urgency:

- no urgency
- desirable by date/event: Feb 2013
- Essential by date/event: _____
- Immediately (ASAP)

Impacted Hardware (select all that apply):

- Repair/modify. List part & SNs: _____
- Scrap & Replace. List part & SNs: _____
- Installed units? List IFO, part & SNs: _____

Impacted Documentation (list all dwgs, design reports, test reports, specifications, etc.):

D1100682 D1100683, D1101977, E1101029, D1100670

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Future units to be built

Disposition (to be completed by Systems Engineering):

TRB

CCB

Approved

Additional information required. Define:

[Requester re-submits with new information with the same DCC E-number for the ECR but the next version number.]

Concurrence by Project Management: (Acknowledged Electronically in DCC)

Project Systems Engineer: Dennis Coyne

Project Systems Scientist: Peter Fritschel