Advanced LIGO Engineering Change Request (ECR)

ECR Title: New naming scheme for OMC channels   **DCC No: E1300794-v1**

Date: 17 October 2013

Requester: Peter Fritschel   **Impacted Subsystem(s): ISC**

Description of Proposed Change(s):

Adopt the scheme that has been developed for the real-time (length) control of the OMC, whereby there is a separate RCG model of the OMC, and corresponding channel names based on the model name. Some of the OMC channel names are then different than found in some ISC documentation (details below). An example of a channel change is (we are adopting the second, model-based convention):

  Documentation name: **$(IFO):LSC-OMC_A**

  RCG model: **$(IFO):OMC-DCPD_A**

In addition to documentation, some TwinCAT code that handles slow controls for these channels will need to be changed, as it currently uses the former, documentation convention.

Reason for Change(s): This ECR is more of a fix of a mismatch between how the OMC front end model has been developed so far, and some early ISC documentation that contains different channel names. We needed to either change the documentation, or change the model, and we are choosing the former.

Estimated Cost: None.

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: _____
- ☐ Essential by date/event: _____
- ☒ Immediately (ASAP)

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Impacted Hardware (select all that apply):

☐ **Repair/Modify. List part & SNs:** _____

☐ **Scrap & Replace. List part & SNs:** _____

☐ **Installed units? List IFO, part & SNs:** _____

☐ **Future units to be built**

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

T1000264 (v5), T1100472 (v9), E1300079 (v3), T1300532 (v1)

TwinCAT code

Disposition of the proposed change(s):

The disposition of this proposed engineering change request is to be completed by Systems Engineering and indicated in the "Notes and Changes" metadata field in the DCC entry for this ECR. The typical dispositions are as follows:

- **Additional Information Required**: in which case the additional information requested is defined. The ECR requester then re-submits the ECR with the new information using the same DCC number for the ECR but with the next version number.
- **Rejected**: in which case the reason(s) for the rejection are to be given
- **Approved**
- **Approved with Caveat(s)**: in which case the caveat(s) are listed
- **TRB**: the ECR is referred to an ad-hoc Technical Review Board for further evaluation and recommendation. It is the System Engineer's (or designee's) responsibility to organize the TRB. The System Engineer (or designee) then makes a technical decision based on the TRB's recommendation. Links to the TRB's documentation (charge, memos, final report, etc.) are to be added to the "Related Documents" field for this ECR.
- **CCB**: a change request for approval of additional funds or schedule impact is to be submitted to the Configuration Control Board. Links to the CCB's documentation (CR, etc.) are to be added to the "Related Documents" field for this ECR.

Concurrence by Project Management:

Acknowledgement/acceptance/approval of the disposition is to be indicated by the electronic "signature" feature in the DCC entry for this ECR, by one the following personnel:

- Systems Scientist
- Systems Engineer
- Deputy Systems Engineer