MiCAP User Guide

1   Introduction :

MiCAP is a custom reconfiguration controller used for DCS. The repository contains the following directories:

- hw: In this directory, it contains all the necessary hardware code of the MiCAP.

- sw: In this directory, it contains all the necessary software drivers of the MiCAP.

2   Hardware integration:

The MiCAP can be used as a *pcore* that can be imported in any XPS project. The hardware source code is located at "/hw/micap_v1_00_a". The user can copy this folder into the user's pcores directory of the XPS project. Next, press the re-scan button in IP catalog of the XPS. The MiCAP should be visible under USER tab of the IP catalog. This user can now use as an user IP and instantiate the MiCAP core for the DCS.

3   Software integration:

Once the bitstream is generated (as guided in the TLUT tool flow), copy all the files present in the directory "/sw" to the swReconfiguration directory of the XPS project. The user can make use of the function "micap_reconfigure ( );" to execute the micro-reconfiguration. An example test code is shown in "testReconfiguration.c".