

Adding a New Link Node

Number settable by rotating switches, add pic to show MSB, LSB.

Type is in the FPGA.

Type is also in database templates.

Types have #defines in mpsLinkNodeMacros.h which can be used for conditional behavior:

```
/* MPS Link Node Configuration Modes */  
  
#define MPS_ANA_MODE           (0x05)  
  
#define MPS_PIC_MODE           (0x04)  
  
#define MPS_MPG_CONTROL_MODE   (0x03)  
  
#define MPS_BYKIK_MODE         (0x02)  
  
#define MPS_BLM_MODE           (0x01)  
  
#define MPS_MITIGATION_CONTROL_MODE (0x00)
```

Booting sequence:

mpsInitialize reads rotary switches for link node #, identity/type from FPGA.

loading db files uses C functions to look up loca and unit, load db with that loca and unit in the file name

mpsGetLinkNodeLOCA() and mpsGetLinkNodeUNIT() functions use link node ID # to index arrays at the top of drvMpsLinkNode.c:

```
char *primaries[50]  
  
char *LOCATIONS[50]  
  
char *locations[50]  
  
char *UNITS[50]  
  
char *units[50]
```

Add the loca and unit to these arrays following existing pattern.

Databases

- One substitutions for the things common to all link nodes, using mps.template, e.g. mpsLTU1MP12.substitutions
- One substitutions file for the flavor of link node, using mps.aln_template, mps.blm_template, mps.byk_template, mps.pic_template, e.g. mpsLTU1MP12.aln_substitutions
- Add new link node to Makefile, e.g. add lines DB += mpsLTU1MP12.template and DB += mpsLTU1MP12.aln_template