Data Path: DO FB to execute\_tb

Project TFS path: $/FW SVI FF Releases/Release1/FD-SW

Project changeset version: 34719

Starting point: p\_dofb\_data->exec\_tb in Execute\_DOFB

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Containing file | | | FD-SW\base\appl\ffbl\src\ffbl\_do.c | Review Date | Reviewer |
| Function or data | | | T\_DOFB\_DATA:: T\_FBIF\_PROCESS\_DATA::exec\_tb | 14-02-25 | AK |
|  | | | | | |
| TFS wit |  | | An address of auto raw\_out\_d is assigned to static duration p\_dofb\_data->exec\_tb.p\_process\_value (Execute\_DOFB:972, Stop\_DOFB:204) | | |
| Impact | | | Undefined behavior  Thread-unsafe w.r.t. respective tasks: FB\_exec\_task, appl\_task | | |
| Resolution | | |  | | |
|  | | | | | |
| TFS wit | |  | IO\_OPT\_INVERT works in purely Boolean fashion for raw\_out\_d.value (Execute\_DOFB:875, Stop\_DOFB:189)  Same for readback (Execute\_DOFB:1022) | | |
| Impact | | | \_DINT control option won’t work. Just document it in the manual? | | |
| Resolution | | |  | | |
|  | | | | | |
| TFS wit | |  | All block parameters are set non-atomically throughout | | |
| Impact | | | Parameters may be read by a host inconsistently among each other and status vs.value | | |
| Resolution | | |  | | |
|  | | | | | |
| TFS wit | |  | Out\_d used before it is initialized (Start\_DOFB:122) | | |
| Impact | | | Probably the root cause of incorrect first run of Execute\_DOFB (old manual value ad from NVMEM). If the FB has never been in MAN, the value is uncertain and may or may not be appropriate. (Our workaround is to skip first run doesn’t cover DO switches) | | |
| Resolution | | |  | | |
|  | | | | | |