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| Project Name | **Sirius** | ECO # | SIR-219 |
| Version No. | **Rev. A** |  |  |
| Requesting Engineer | Weiwei Shen | Request Date | 18-8-2018 |
| Approve Manager | Song Pan | Request Date | 18-8-2018 |
| Problem to be fixed | 1. **Bug/Issue description:**   **The otp\_read\_address\_i\_reg[16:0]’s async DFF type replace as sync DFF.**   1. **Impact if this ECO is not implemented:**   **To enhance the circuit.** | | |
| Affected Parts | 1. **Affected IP(s)**   **OTP.**   1. **Affected Partition(s)**   **SUB4.**   1. **Current status of affected Partitions(s)  (Placement, Pre-CTS, Post-CTS, Post-Route, STA, etc)**   **STA** | | |
| Fix Solution | **Describe briefly how to solve the problem.**   1. **Add 17 AND2 between the rst signal and the original D input to the DFF’s D input.** 2. **Replace 17 async DFF type as sync DFF.** | | |
| Change Description | 1. **Change method (manual ECO fix on netlist or partial Re-synthesis):**   Manual ECO fix **@SUB4**   1. **Change effort :** 2. **Connection change or Logic fix:**   **Add 17 AND2 between the rst signal and the original D input to the DFF’s D input.**  **Replace 17 async DFF type as sync DFF.**   1. **How many DFFs or combinational cells will be added or affected in this ECO?**     **Add 17 combinational cell, 17 DFFs were affected.**   1. **Does it have interface change on IP top level? If yes, please describe it in detail**     **NO.**   1. **Change Schematics:** 2. **Others (for analog macros):** | | |
| IP interface change | **NO.** | | |
| File to be changed | **otp\_top\_ctrl.v** | | |
| Change Impacts | 1. **Impacts on scan chain :**   **NO.**   1. **Impacts on timing critical path:**   **NO.**   1. **Impacts on IP size and/or floorplan:**   **NO.** | | |
| Verification status | **Done.** | | |