User sets HJREQ = 1 to initiate Hot-Join request

HJEN = 1?

No, Target can still perfrom other transactions on the bus

Yes

Wait for Bus Idle Condition and then issue a Start (or) Wait for a Start

Send Reserved Target Address of 7'h02 / W

Arbitration Successful?

No

Yes

Controller can perform one of 3 actions

Controller NACKs

Controller NACKs, sends Restart, then Broadcasts the DISEC CCC with the DISHJ bit set

Controller ACKs, then sends the Broadcast ENTDAA CCC

Enters Dynamic Address assignment mode, the received address is stored in I3CxDADR register

Arbitration Request Limit Reached (I3CxRETRY)?

No

Yes

HJEIF = 1 set by the hardware

DACHIF = 1 set by the hardware

HJREQ bit cleared by the hardware, Hot-Join Process Complete

Note:

1. Error Detection and Recovery Methods are not shown

2. Shaded boxes are Controller specific actions.