

4.2 Design Failure Mode and Effects Analysis

Activity Purpose:

- Identify potential design failure modes, their associated causes and their effects.
- Implement effective and adequate countermeasures for the potential failure modes and their associated causes.

Note(s):

- Significant system faults shall be analysed using FTA (Fault Tree Analysis) to identify all possible causes and implement countermeasures for them.
- The scope of this activity will be decided through discussion between Nissan and suppliers.

Phase	1	2	3	4	5
Activity Content		<ul style="list-style-type: none"> ● Organize the system structure and functions using System Structure Diagram and Function Block Diagram. ● Detect potential failure modes and decide countermeasures for them using FMEA / DRBFM. ● Incorporate the countermeasures in drawing / CAD data etc. ● Clarify important control characteristics that need to be controlled in mass-production process to realize product function. 	<ul style="list-style-type: none"> ● Review and update related output documents whenever the design is changed or modified. 		
Output Document		<ul style="list-style-type: none"> ● System Structure Diagram ● Function Block Diagram ● Design FMEA ● FTA (Fault Tree Analysis) 			
		<ul style="list-style-type: none"> ● Changes List (Quick DR) ● DRBFM worksheet (Quick DR) 			