

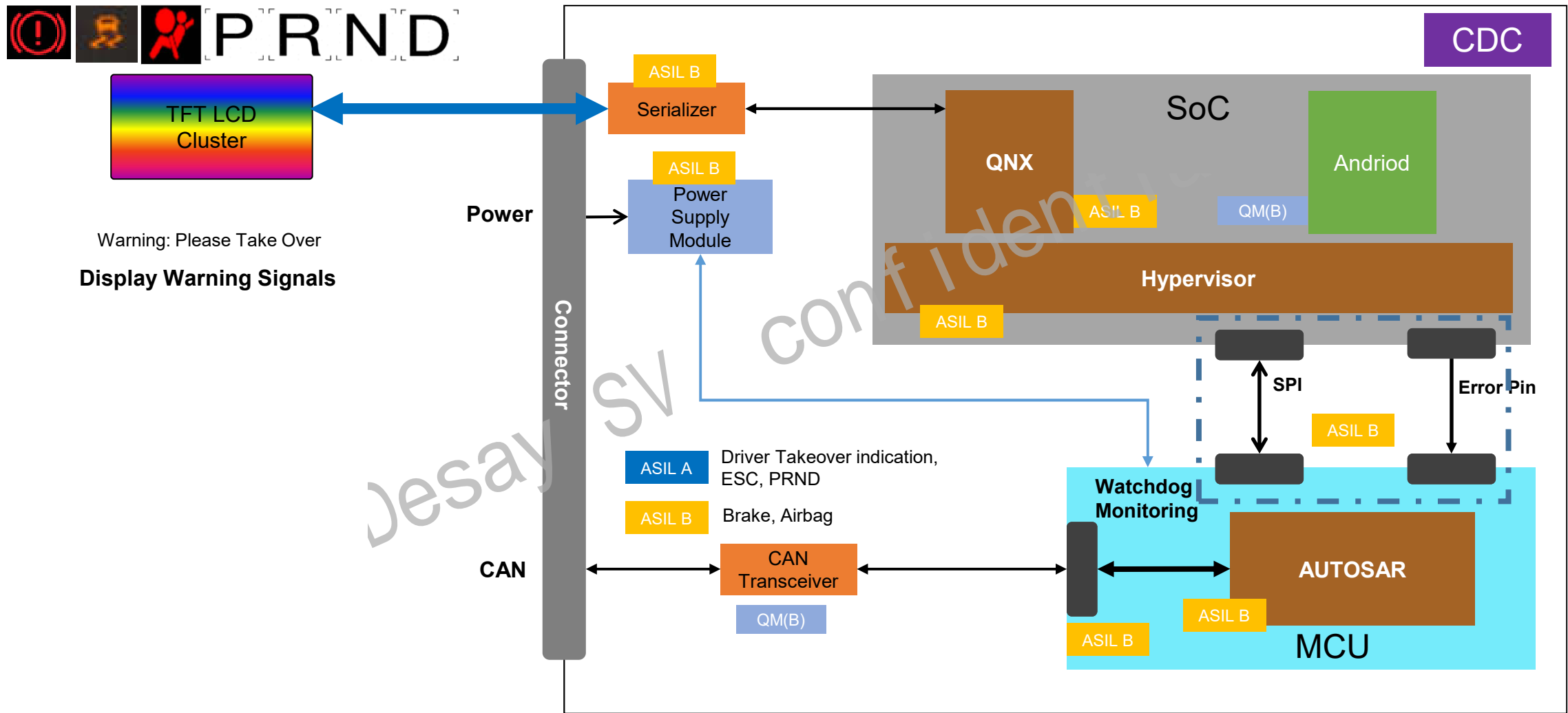
Cluster Functional Safety

Cluster FuSa Requirement

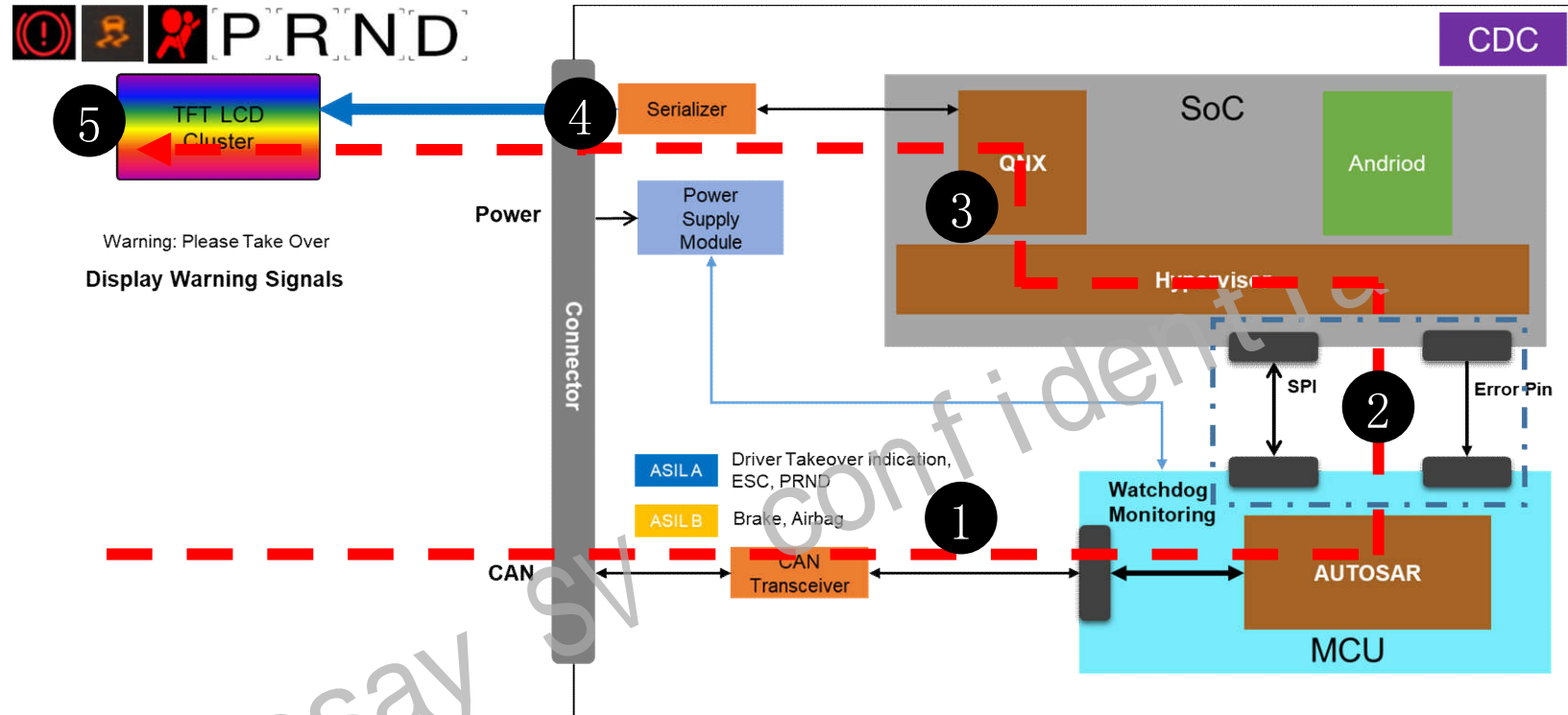
Features/Function		Assign to CX821/771 IVI			
Name	safety goals	ASIL Rating	ASIL	Safe status	Ref.Spec
Driver Takeover Indication	SG05: Help maintain driver awareness	A	A	Driver Take-over warning;	detail see SRS
Brake Telltale	Avoid degraded deceleration due to severe underbraking (decel capability <2.44 m/s/s) (ASIL D)	B	B	<Illuminate Telltale> <Blank Display>	detail see SRS
	Avoid unintended vehicle movement due to loss of brake torque while stationary on a grade and driver is not present			<Illuminate Telltale> <Blank Display>	
ESC Telltale	Avoid degraded stability due to no braking to at least one wheel when stabilizing torque is required to avoid hazard	A	A	<Illuminate Telltale> <Blank Display>	detail see SRS
ESC OFF Telltale	Avoid degraded stability due to no braking to at least one wheel when stabilizing torque is required to avoid hazard	A	A	<Illuminate Telltale> <Blank Display>	detail see SRS
Amber airbag warning	Prevent unintended deployment under normal and typical rough road conditions	B	B	Driver information	detail see SRS
Display the Range To Display Commanded by the TCM	Prevent Unintended Vehicle Movement (UVM) - Park Selection lost or not achieved	A	A	Display No Range	detail see SRS

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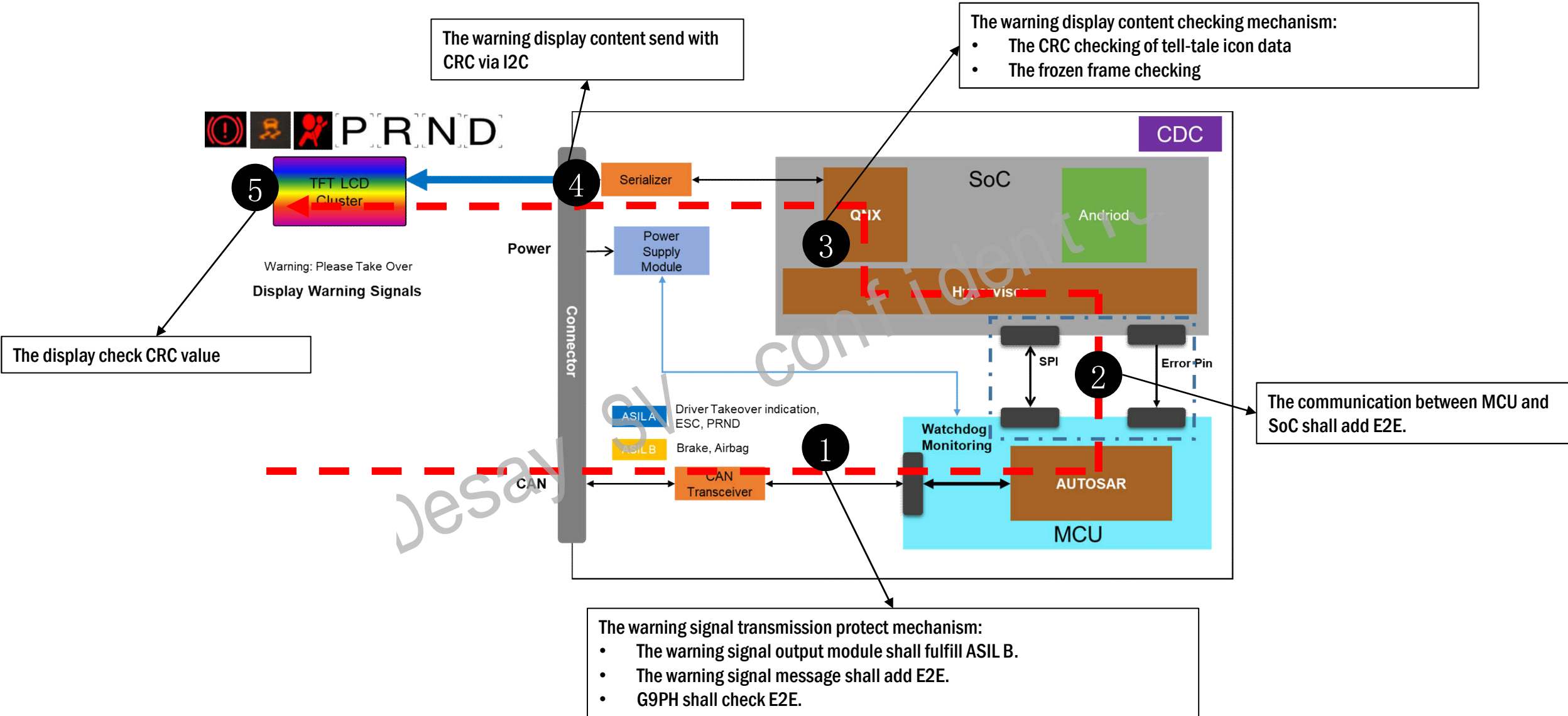


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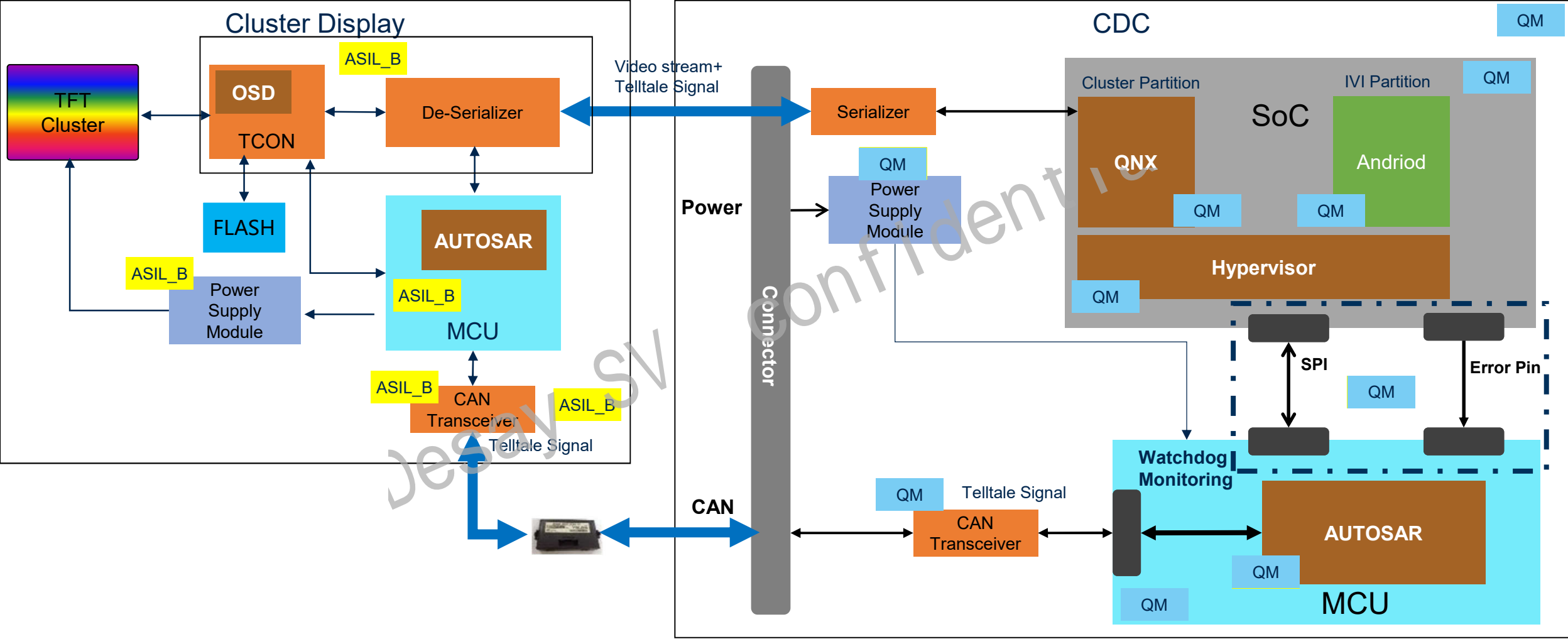
- ① The warning signal input correctly
- ② The transmission between MCU and SoC correctly.
- ③ The display content of warning signal processing correctly.
- ④ The display content transmission correctly.
- ⑤ The display correctly.

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VAVE Proposal



Remark: ASIL B telltale feature is entirely realized in cluster display. CDC system is kept in QM level (recommendation)