

**INSTRUCTIONS:**

Fill out the hazard analysis and risk assessment below.

HA-001 should be for the lane departure warning function as discussed

HA-002 should be for the lane keeping assistance function as discussed

Then come up with your own situations and hazards for the lane assistance

When finished, export your spreadsheet as a pdf file so that a reviewer

Hazard ID			
	Operational Mode	Operational Scenario	Environmental Details
HA-001	OM03 - Normal driving	OS04 - Highway	EN06 - Rain (slippery road)
HA-002	OM03 - Normal driving	OS03 - Country Road	EN01 - Normal
HA-003	OM03 - Normal driving	OS02 - City Road	EN04 - Snowfall
HA-004	OM03 - Normal driving	OS03 - Country Road	EN04 - Snowfall

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stance system. Fill in the HA-003 and HA-004 rows.  
er can easily see your work.

Situational Analysis			
Situation Details	Other Details (optional)	Item Usage (function)	Situation Description
SD02 - High speed		IU01 - Correctly	Normal driving on a highway during rain
SD02 - High speed		IU02 - Incorrectly	Normal driving on a country road during
SD02 - High speed		IU01 - Correctly	Normal driving on a country road during
SD02 - High speed		IU01 - Correctly	Normal driving on a city road during

Hazard Identification			
Function	Deviation	Deviation Details	Hazardous Event (resulting effect)
Lane Departure	DV04- Actuator	The Lane Departure	EV00 - Collision with
Lane Keeping	DV03 - Function	Lane Keeping function is	EV00 - Collision with
Lane Departure	DV19 - Sensor	The LDW function applies	EV00 - Collision with
Lane Keeping	DV19 - Sensor	The LKA function gets	EV00 - Collision with

Event Details	Hazardous Event Description	Exposure (of situation)
High haptic feedback can affect	The LDW function applies an	E3 - Medium
Driver use the function as if the	The LKA function is always	E2 - Low
Unneccessary Haptic Feedback	The LDW function gets	E2 - Low
Unneccessary torque for Lane	The LKA function gets	E2 - Low

Hazardous Event Classification			
Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)
Highway driving with rain can	S3 - Life-threatening or	High speed driving	C3 - Difficult to control or
The combination of country	S3 - Life-threatening or	High speen driving	C3 - Difficult to control or
Snowfall driving occurs only few	S3 - Life-threatening or	High speen driving	C3 - Difficult to control or
Snowfall driving occurs only few	S3 - Life-threatening or	High speen driving	C3 - Difficult to control or

	Determination of ASIL and Safety Goals	
Rationale (for controllability)	ASIL Determination	Safety Goal
Difficult to stay calm if steereing wheel is moving	C	The oscillating steering torque from the
Because hands aren't on the wheel at high	B	The Lane Keeping Assistance function
Difficult to stay calm if steering wheel applies	B	The LDW function should be disabled
Difficult to control the vehicle if steering wheel	B	The LKA function should be disabled