

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	EN02 - Sun glare
HA-004	OM03 - Normal driving	OS04 - Highway	EN03 - Fog

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stance system. Fill in the HA-003 and HA-004 rows.
ar 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 country roads during
SD02 - Low speed		IU01 - Correctly	Normal driving on a highway during sun
SD02 - High speed		IU01 - Correctly	Normal driving on a highway during foggy

Hazard Identification			
Function	Deviation	Deviation Details	Hazardous Event (resulting effect)
Lane Departure	DV04 - Actor	The LDW function applies	EV00 - Collision with
Lane Keeping	DV03 -	the driver is misusing the	EV00 - Collision with
Lane Departure	DV19 - Sensor	The camera sensor	EV00 - Collision with
Lane Keeping	DV19 - Sensor	The camera sensor doesn't	EV00 - Collision with

Event Details	Hazardous Event Description	Exposure (of situation)
High haptic feedback can affect	The LDW function applies an	E3 - Medium
A driver takes both hands off of	A driver uses the function	E2 - Low
A driver confuse the direction to	Other vehicle is too close but	E2 - Low
Camera couldn't sense the road	In curved road, the vehicle	E2 - Low

Hazardous Event Classification			
Rationale (for exposure)	Severity (of potential harm)	Rationale (for severity)	Controllability (of hazardous event)
Probability of the Driving on	S3 - Life-threatening or	Collision at high	C3 - Difficult to control or
Probability of the Misusing is	S3 - Life-threatening or	Collision at high	C3 - Difficult to control or
Probability of the reverse of	S1 - Light and moderate	Collision at low speed	C2 - Normally
Probability of the broken of	S3 - Life-threatening or	Collision at high	C2 - Normally

	Determination of ASIL and Safety Goals	
Rationale (for controllability)	ASIL Determination	Safety Goal
Slippering in rainy road with high speed, it is	C	The oscillating steering torque from the
it's too late to response and avoid the collision	B	The lane keeping assistance function
driver can see the other vehicle with side mirror	QM	The LDW indication shall indicate the
driver can see the lane from front	A	The lane keeping assistance function