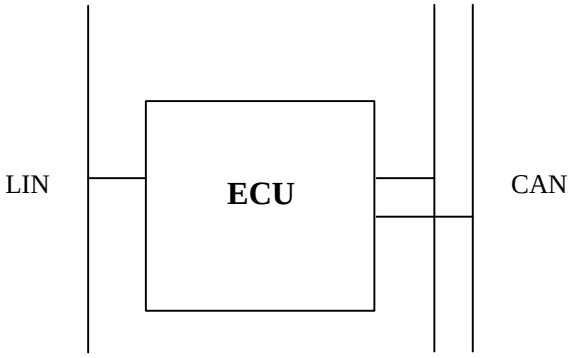
上汽集团 SAIC MOTOR	Change Description	A = Added D = Deleted C = Changed/Correct	Document Release Status	
			Date 2017-11-20	Modification Count

Network Requirement Specification

SAIC Motor Network Requirement Specification FVCM EP21_EP2_V07



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1 CHANGE INFORMATION

Revision	Date	Description A=Added C=Changed/Corrected D=Deleted
EP21-V01	2016/07/07 2016/07/14	First version EP21 Network NCF: 1040766501 A: CCPCROFVCM /Rx A: CCPDTOFVCM /Tx Add subscribe to following signals: BCMAvlbly BPMMstrAvlbly ECMAvlbly FICMAvlbly HCUAvlbly IPCAvlbly SDMAvlbly TBOXAvlbly TCMAvlbly VehCofignAC VehCofignBodyCtrlrTyp VehCofignCCTyp VehCofignEnTyp VehCofignHybLvl VehCofignInftnTyp VehCofignParkngBrkTyp VehCofignSlipCtrlTyp VehCofignSpSt VehCofignSta VehCofignStrgTyp VehCofignTPMSTyp VehCofignTrnsfCaseTyp VehCofignTrTyp VehInfoBodyTyp VehInfoBrand VehInfoDrvHadlTyp VehInfoEmsnRegn VehInfoMdlYear VehInfoMkt VehInfoPf
Revision	Date	Description A=Added C=Changed/Corrected D=Deleted
EP1-V02	20/11/2016	C: LKAHptWrnngReq to LKAHapticWrnngReq LKAHptWrnngDspCmd to LKAHapticWrnngDspCmd LDWSysSts encoding LDWWrnngIndReq encoding LDWSysFltSts /Tx LDWLaneDetnInd /Tx

		FVCMCalPrgsReq /Tx LKAWrnngIndReq /Tx LKALaneDetnInd /Tx **NCFRefNoFVCM** D: LKASysStsIndReq /Tx
EP2_V03	2017/05/08	EP22 Network NCF: 1040766503 2017.04.27 updated: Tx added: LKASysStsIndReq LKAHptWrnngDspCmd FCWSts LKAReqToqSts Rx added: LKAHptWrnngReq TrShftPtrnASts EPSFlrSts EPTEDUClntPumpSts Tx changed: Change the encoding ACCAEBDclReqVal Change the encoding ACCDrvrSeldTrgtDistLvl Change the encoding ACCDetObjDistLvl Change the encoding LDWSysSts Change the encoding LDWWrnngIndReq Change the encoding DistSinceTrgtCamr Rx changed: Change signal length ChLKARespToqPV Change the encoding TrOtptRotlStsRotDircn Change the encoding SysPwrMd Change the encoding ChLKACtrlSts Change the encoding FCWSnstvtLvlReq
	2017/05/13	Rx changed: encoding changed TrOtptRotlStsRotDircn 2017.05.12 updated: Tx deleted: LKASysStsIndReq LKAHptWrnngDspCmd FCWSts LKAReqToqSts LKAVbnReq Rx deleted: EPSFlrSts EPTEDUClntPumpSts ParkBrkSwA LKAHptWrnngReq Rx added: EPTDrvngMdSwSts Tx changed: ChangeFVCM LDWSysSts

		Change FVCM LDWWrnngIndReq Tx added LDWLKAVbnLvlReq LKAReqToqSts LKAReqToqV change LKAReqToqPV length /Tx change the encoding ChLKACtrlSts /Rx
	2017/05/15	Tx changed: Change FVCM LDWSysSts Tx deleted: LKAToqReqSts
EP2_V04	2017/05/24	EP21 Network NCF: 1040766504 NCFRefNoFVCM changed 2017.05.24 updated: Tx added: HandOffStrgWhlDetnSta HandOffStrgWhlDetnStaV LDWLKADspCmd LDWLKAHapticWrnngDspCmd LDWLKALVsulznReq LDWLKARVsulznReq TJAICADspCmd TJAICASysFltSts TJAICASysSts Tx deleted: ACCAEBBrkJerkLvlReq ACCAEBDclReqSts ACCAEBDclReqVal ACCAEBDclReqValPV ACCAEBToqReqSts ACCAlvRC ACCDetObjDistLvl ACCDrvrSeldTrgtDistLvl ACCDrvrSelTrgtSpd ACCDrvrTkovReq ACCGoNotfr ACCObjDet ACCSdslReq ACCSysCanclReq ACCToqReqVal ACCToqReqValPV AEBDspCmd AEBPrflReq FCWDspCmd FCWrnngSts FCWSnstvtLvl FCWSysFltSts Rx deleted: AccelOvrd AEBSwReq AutocTrGearShftDircn AutocTrGearShftDircnF

			BntOpenSts BPMMstrAvlbly BrkPdlPosV CCPCROFVCM CCSwStsAlvRC CCSwStsCanclSwA CCSwStsDistDecSwA CCSwStsDistIncSwA CCSwStsOnSwA CCSwStsPV CCSwStsRsmSwA CCSwStsSetSwA CCSwStsSpdDecSwA CCSwStsSpdIncSwA CCSwStsSwDataIntgty ChACCAEBAlvRC ChACCAEBDclReqResp ChACCAEBDclReqRespPV ClPos ClPosV DrvrDoorOpenSts EnToqActuExtdRng EnToqActuExtdRngV EnToqMaxExtdRng EnToqMaxExtdRngV EnToqMinExtdRng EnToqMinExtdRngV EPBAppcnSts EPBAppcnStsPV EPBCCCanclReqd EPTDrvngMdSwSts EPTTrInptShaftMaxAvlblToq EPTTrInptShaftMaxAvlblToqV EPTTrInptShaftMinAvlblToq EPTTrInptShaftMinAvlblToqV EPTTrInptShaftToq EPTTrInptShaftToqV FCWSnstvtLvlReq FCWSwReq FrtPsngDoorOpenSts KeyDetIndx LKAHapticWrnngReq PtACCToqReqResp PtACCToqReqRespPV PtADASAlvRC RLDoorOpenSts RRDoorOpenSts RstrFctryDeftsReq TrCCCanclReq TrEmsnRltdMalfA TrlrHitchSwA TrNonEmsnRltdMalfA TrOtptRotlStsRotDircn TrOtptRotlStsV TrShftPtrnASts VehCofignAC VehCofignBodyCtrlrTyp

			VehCofignCCTyp VehCofignEnTyp VehCofignHybLvl VehCofignInftnTyp VehCofignParkngBrkTyp VehCofignSlipCtrlTyp VehCofignSpSt VehCofignSta VehCofignStrgTyp VehCofignTPMSTyp VehCofignTrnsfCaseTyp VehCofignTrTyp VehInfoBodyTyp VehInfoBrand VehInfoDrvHadlTyp VehInfoEmsnRegn VehInfoMdlYear VehInfoMkt VehInfoPf Rx added: EPSFlrSts LDrvnWhlRotDircn LDWLKAHapticWrnngReq LDWLKASwReq LNonDrvnWhlRotlDircn ParkBrkSwA RDrvnWhlRotDircn RNonDrvnWhlRotlDircn TJAICASwReq
		2017.05.25	Tx deleted: CCPDTOFVCM LDWDspCmd LDWLaneDetnInd LDWWrnngIndReq LKAAdoWrnngDspCmd LKADspCmd LKAHapticWrnngDspCmd LKALaneDetnInd LKASnstvtLvl LKAWrnngIndReq Rx deleted: EPSDlvrdTotToq EPSDlvrdTotToqV EPSFlrSts LDWSwReq LKAAdoWrnngReq LKASnstvtLvlReq LKASwReq
		2017.05.26	Change: LDWLKASwReq encoding changed Rx deleted: LDrvnWhlRotDircn,RDrvnWhlRotDircn

			Rx added: LDrvnWhlRotlDircn,RdrvnWhlRotlDircn Rx change: VehSideLghtSts initial value changed
		2017.05.27	Rx deleted: ParkBrkSwA BrkPdlPos
		2017.06.08	Tx changed: LDWSysSts initial value changed
		2017.07.18	Rx added: RstrFctryDeftsReq BPMMstrAvlbly
	EP21_EP2_V07	2017.10.30	EP21 EP2 Network NCF: 1040766507 Tx deleted: ACCSysFltSts ACCSysSts AEBSysFltSts AEBSysSts
		2017.11.01	NCFRefNoFVCM updated Tx deleted: LKAAdoWrnngDspCmd LKASnstvtLvl
		2017.11.20	Tx deleted: LKASnstvtLvl LKAAdoWrnngDspCmd

2 REFERRED DOCUMENTS

References are made to the following documents:

[1] SMTC 2 800 002 CAN Node Design Requirements

[2] SMTC 2 800 003 - LIN Node Design Requirements

[3] “Volcano Concept Overview, V5-gen-006 rev C

[4] “Volcano 5 signal timing model, V5-cfg-003 rev 03

3 GENERAL

3.1 Document description

This document (Network Requirement Specification, doc type: NRS) is a complementary document to the specification for the ECU. It is automatically generated from the network design tool. NRS is the update version of SWRS(Software Requirement Specification),and covers all content of SWRS. In addition the information of hardware interface is added to NRS.

The signal definitions in this document (Signal specification) shall be regarded as the valid definition, if the information in the NRS specification and the Signals Database are contradictory.

4 INTERFACE REQUIREMENTS

4.1 Hardware interface

In EP21 program, FVCM isn't regular termination node, high impedance termination concept or non termination concept should be used according to referred document [1].

4.2 Overview of signals

Transmitted Signals	Subscriber Nodes
AutoMainBeamLghtReq	Body_Controller, IPK
DiagnosticRespFVCM	Diagnostics
DistSinceTrgtCamr	VCU
DTCInfomationFVCM	TBOX
FVCMBlkd	FICM, IPK
FVCMCalPrgsReq	IPK
FVCMFltSts	EPS, FICM, IPK
HandOffStrgWhlDetnSta	IPK
HandOffStrgWhlDetnStaV	IPK
LDWAdoWrnngDspCmd	FICM, IPK
LDWLKADspCmd	FICM, IPK
LDWLKAHapticWrnngDspCmd	FICM
LDWLKALVsulznReq	FICM, IPK
LDWLKARVsulznReq	FICM, IPK
LDWLKAVbnLvlReq	EPS, FICM
LDWSnstvtLvl	FICM
LDWSysFltSts	FICM, IPK
LDWSysSts	FICM, IPK
LKAAlvRC	EPS
LKADrvrTkovReq	EPS, IPK
LKAReqToq	EPS
LKAReqToqPV	EPS
LKAReqToqSts	EPS
LKAReqToqV	EPS
LKASysFltSts	EPS, IPK
LKASysSts	EPS, FICM, IPK
SpdAstReqStsCamr	VCU
TJAICADspCmd	FICM, IPK
TJAICASysFltSts	EPS, FICM, IPK
TJAICASysSts	EPS, FICM, IPK
TrgtSpdReqCamr	VCU

Received Signals	Publisher Node
ABSA	SCSABS
ABSF	SCSABS
AccelActuPos	Tester
AccelActuPosV	Tester
AccelEfctvPos	Tester

AirbagDpl	SDM
AirbagDplInvsn	SDM
BCMAvlbly	GW
BPMMstrAvlbly	GW
BrkPdlDrvrAppdPrs	SCSABS
BrkPdlDrvrAppdPrsAlvRC	SCSABS
BrkPdlDrvrAppdPrsV	SCSABS
CalendarDay	IPK
CalendarMonth	IPK
CalendarYear	IPK
ChLKAAlvRC	EPS
ChLKACtrlSts	EPS
ChLKARespToq	EPS
ChLKARespToqPV	EPS
ChLKARespToqV	EPS
ClstrDspdVehSpd	IPK
DiagnosticFuncAddrReq	Diagnostics
DiagnosticReqFVCM	Diagnostics
DipdBeamLghtOn	Body_Controller
DircnIndLampSwSts	Body_Controller
DrvrSbltAtc	SDM
DrvrSbltAtcV	SDM
DrvrStrgDlvrdToq	EPS
DrvrStrgDlvrdToqV	EPS
DspMeasSys	IPK
ECMAvlbly	GW
En12VoltStrMotCmddOn	Tester
EnASSSta	Tester
EnRunA	Tester
EnSpd	Tester
EPTAccelActuPos	VCU
EPTAccelActuPosV	VCU
EPTAccelEfctvPos	VCU
EPTBrkPdlDscrtInptSts	VCU
EPTBrkPdlDscrtInptStsV	VCU
EPTRdy	VCU
EPTStCmdOn	VCU
FICMAvlbly	GW
FrtFogLghtOn	Body_Controller
FrtWiperParkPosA	Body_Controller
FrtWiperSwSts	Body_Controller
FrtWshrPumpA	Body_Controller
HCUAvlbly	GW
HourOfDay	IPK
IPCAvlbly	GW
LDircnIndLghtF	Body_Controller
LDircnIO	Body_Controller
LDrvnWhlRotlDircn	SCSABS
LDWAdoWrnngReq	FICM
LDWLKAHapticWrnngReq	FICM
LDWLKASwReq	FICM

LDWSnstvtLvlReq	FICM
LNonDrvnWhlRotlDircn	SCSABS
MainBeamLghtOn	Body_Controller
MinuteOfHour	IPK
OtsdAirTemCrVal	GW
OtsdAirTemCrValV	GW
PtBrkPdlDscrtInptSts	Tester
PtBrkPdlDscrtInptStsV	Tester
PwrMdMstrAccryA	GW
PwrMdMstrRunCrkA	GW
RDircnIndLghtF	Body_Controller
RDircnIO	Body_Controller
RDrvnWhlRotlDircn	SCSABS
RNonDrvnWhlRotlDircn	SCSABS
RrFogLghtOn	Body_Controller
RstrFctryDeftsReq	FICM
SDMAvlbly	GW
SDMRC	SDM
SecsOfMinute	IPK
SpdAstMdECM	VCU
SpdAstSysStsECM	VCU
SpdAstSysTrgtSpd	VCU
StrgWhlAng	EPS
StrgWhlAngAlvRC	EPS
StrgWhlAngExtdPV	EPS
StrgWhlAngGrd	EPS
StrgWhlAngSnsrCalSts	EPS
StrgWhlAngSnsrChksm	EPS
StrgWhlAngSnsrFlt	EPS
StrgWhlAngSnsrInid	EPS
StrgWhlAngSnsrMultCapb	EPS
StrgWhlAngV	EPS
SysBPM	Body_Controller
SysBPMEnbd	Body_Controller
SysOpnlMd	GW
SysPwrMd	GW
SysVol	GW
SysVolMd	GW
SysVolMdV	GW
SysVolV	GW
TBOXAvlbly	GW
TCMAvlbly	GW
TCSA	SCSABS
TCSOpngMd	SCSABS
TCSOpngSts	SCSABS
TJAICASwReq	FICM
TrEstdGear	VCU
TrEstdGearV	VCU
TrgtSpdSrcSts	VCU
TrShftLvrPos	VCU
TrShftLvrPosV	VCU

VehDynYawRate	SCSABS
VehDynYawRateV	SCSABS
VehOdo	GW
VehOdoV	GW
VehSideLghtSts	Body_Controller
VehSpdAvg	SCSABS
VehSpdAvgAlvRC	SCSABS
VehSpdAvgDrvn	SCSABS
VehSpdAvgDrvnV	SCSABS
VehSpdAvgNonDrvn	SCSABS
VehSpdAvgNonDrvnV	SCSABS
VehSpdAvgPV	SCSABS
VehSpdAvgV	SCSABS
VSELatAcc	SCSABS
VSELatAccV	SCSABS
VSELongtAcc	SCSABS
VSELongtAccV	SCSABS
VSEMd	SCSABS
VSESts	SCSABS
VSESysA	SCSABS
WhlGndVelDrvnChksm	SCSABS
WhlGndVelDrvnRC	SCSABS
WhlGndVelLDrvn	SCSABS
WhlGndVelLDrvnV	SCSABS
WhlGndVelLNonDrvn	SCSABS
WhlGndVelLNonDrvnV	SCSABS
WhlGndVelNonDrvnChksm	SCSABS
WhlGndVelNonDrvnRC	SCSABS
WhlGndVelRDrvn	SCSABS
WhlGndVelRDrvnV	SCSABS
WhlGndVelRNonDrvn	SCSABS
WhlGndVelRNonDrvnV	SCSABS

Constant Signals

NCFRefNoFVCM

4.3 Transmitted signals

Interface: FVCM_HSC2

AutoMainBeamLghtReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **AutoMainBeamLghtReqET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			No Request
Logical Value	1			Request ON from camera
Logical Value	2			Request OFF from camera
Logical Value	3			cannot detected the environment

DiagnosticRespFVCM						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
64	Bytes	State	Sporadic	DIAG_PhysResp_FVCM	No	0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	5.000	10.000
	FM_Quiet_HS	5.000	10.000
	FM_Silent_HS	5.000	10.000

Description: Diagnostic response from FVCM

DistSinceTrgtCamr						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **DistSinceTrgtCamrET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	8.235	-100	m

DTCInfomationFVCM						
Size [bits] 56	**Type** Bytes	**Info Type** State	**Generation Type** Sporadic	**Group Name** N/A	**Update Bit** No	**Initial Value** 0x00 0x00 0x00 0x00 0x00 0x00 0x00

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	1000.000

Description:

DTC Infomation of FVCM

The length of DTC information signal is 7 bytes.
Byte 0 is MSB (most significant byte), and Byte 6 is LSB (least significant byte).
For each byte, Bit 7 is msb (most significant bit), and Bit 0 is lsb (least significant bit).

Byte 0:
Bit (7-4): DTC Serious Level
Bit (3-0): Reserved

Byte 1:
Bit (7-0): Reserved

Byte 2:
Bit (7-0): DTCHighByte

Byte 3:
Bit (7-0): DTCLowByte

Byte 4:
Bit (7-0): DTCFailureTypeByte

Byte 5:
Bit 7: warningIndicatorRequested
Bit 6: testNotCompletedThisOperationCycle
Bit 5: testFailedSinceLastClear
Bit 4: testNotCompletedSinceLastClear
Bit 3: confirmedDTC
Bit 2: pendingDTC
Bit 1: testFailedThisOperationCycle
Bit 0: testFailed

Byte 6:
Bit (7-0): DTC Type

For more detail, please refer to SMTC 2 800 004.

FVCMBlkd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **FVCMBlkdET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

FVCMCalPrgsReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **FVCMCalPrgsReqET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			0% (Calibration Started)
Logical Value	2			25%(Calibration in progress)
Logical Value	3			50% (Calibration in progress)
Logical Value	4			75% (Calibration in progress)
Logical Value	5			100%(Calibration Finished)
Logical Value	6			calibration failed
Logical Value	7			reserved

FVCMFltSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **FVCMFltStsET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			No Fault
Logical Value	1			Fault
Logical Value	2			Reserved
Logical Value	3			Reserved

HandOffStrgWhlDetnSta						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **HandOffStrgWhlDetnStaET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Hands Off
Logical Value	1			Hands On
Logical Value	2			unknow
Logical Value	3			Reserved

HandOffStrgWhlDetnStaV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **HandOffStrgWhlDetnStaVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

LDWAdoWrnngDspCmd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	2

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LDWAdoWrnngDspCmdET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Unavailable
Logical Value	1			off
Logical Value	2			on
Logical Value	3			reserved

LDWLKADspCmd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Lane Departure Warning Lane Keeping Assist Display Command

Encoding type: Name: **LDWLKADspCmdET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Unavailable
Logical Value	1			off
Logical Value	2			LDW
Logical Value	3			LDP(Include LDW warning)
Logical Value	4			LKA
Logical Value	5			reserved
Logical Value	6			reserved
Logical Value	7			reserved

LDWLKAHapticWrnngDspCmd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	2

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Lane Departure Warning Lane Keeping Assist Haptic Warning Display Command

Encoding type: Name: **LDWLKAHapticWrnngDspCmdET**

Size: 2 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			unavailable
Logical Value	1			off
Logical Value	2			on
Logical Value	3			reserved

LDWLKALVsulznReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Lane Departure Warning Lane Keeping Assist Left Visualization Request

Encoding type: Name: **LDWLKALVsulznReqET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no display
Logical Value	1			line tracking
Logical Value	2			intervention
Logical Value	3			warning
Logical Value	4			intervention&warning
Logical Value	5			Reserved
Logical Value	6			Reserved
Logical Value	7			Reserved

LDWLKARVsulznReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Lane Departure Warning Lane Keeping Assist Right Visualization Request

Encoding type: Name: **LDWLKARVsulznReqET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no display
Logical Value	1			line tracking
Logical Value	2			intervention
Logical Value	3			warning
Logical Value	4			intervention&warning
Logical Value	5			Reserved
Logical Value	6			Reserved
Logical Value	7			Reserved

LDWLKAVbnLvlReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LDWLKAVbnLvlReqET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			Level 1
Logical Value	2			Level 2
Logical Value	3			Level 3

LDWSnstvtLvl						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	2

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Lane Departure Warning Sensitivity Level

Encoding type:

Name: **LDWSnstvtLvlET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			unavailable
Logical Value	1			Low
Logical Value	2			Standard
Logical Value	3			High

LDWSysFltSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LDWSysFltStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no error
Logical Value	1			performance degradation
Logical Value	2			system temporary unavailable
Logical Value	3			service required
Logical Value	4			Reserved
Logical Value	5			Reserved
Logical Value	6			Reserved
Logical Value	7			Reserved

LDWSysSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LDWSysStsET**
Size: 3 bits
Description: 2017.05.05: 0x4 changed 0x5 changed

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Stand by
Logical Value	2			Active
Logical Value	3			Override
Logical Value	4			service required
Logical Value	5			system temporary unavailable
Logical Value	6			reserved
Logical Value	7			reserved

LKAAlvRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LKAAlvRCET**
Size: 4 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 15	1	0	

LKADrvrTkovReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LKADrvrTkovReqET**
Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

LKAReqToq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
11	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:	Name:	**LKAReqToqET**				
	Size:	11 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 2047	0.01	-10.24	Nm

LKAReqToqPV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
14	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:	Name:	**LKAReqToqPVET**				
	Size:	14 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 16383	1	0	

LKAReqToqSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:	Name:	**LKAReqToqStsET**				
	Size:	2 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			no request
		Logical Value	1			torque request
		Logical Value	2			reserved
		Logical Value	3			reserved

LKAReqToqV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:	Name:	**LKAReqToqVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

LKASysFltSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LKASysFltStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no error
Logical Value	1			performance degradation
Logical Value	2			system temporary unavailable
Logical Value	3			service required

LKASysSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **LKASysStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Stand by
Logical Value	2			Active
Logical Value	3			Override

SpdAstReqStsCamr						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **SpdAstReqStsCamrET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Fault
Logical Value	1			Undefined
Logical Value	2			Active

TJAICADspCmd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Traffic Jam Assist Integrated Cruise Assist Display Command

Encoding type: Name: **TJAICADspCmdET**

Size: 2 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			unavailable
Logical Value	1			off
Logical Value	2			on
Logical Value	3			reserved

TJAICASysFltSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Traffic Jam Assist Integrated Cruise Assist Fault Status

Encoding type: Name: **TJAICASysFltStsET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no error
Logical Value	1			performance degradation
Logical Value	2			system temporary unavailable
Logical Value	3			service required
Logical Value	4			Reserved
Logical Value	5			Reserved
Logical Value	6			Reserved
Logical Value	7			Reserved

TJAICASysSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Description: Traffic Jam Assist Integrated Cruise Assist System Status

Encoding type:

Name: **TJAICASysStsET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Stand by
Logical Value	2			Active
Logical Value	3			Override
Logical Value	4			reserved
Logical Value	5			reserved
Logical Value	6			reserved
Logical Value	7			reserved

TrgtSpdReqCamr						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode**	**Pub. Latency [ms]**	**Write Interval [ms]**
	FM_Normal_HS	10.000	0.000

Encoding type:

Name: **TrgtSpdReqCamrET**

Size: 15 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 32767	0.015625	0	

4.4 Received signals

Interface: FVCM_HSC2

ABSA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **ABSAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

ABSF						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **ABSFET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

AccelActuPos						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **AccelActuPosET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	0.392157	0	%

AccelActuPosV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **AccelActuPosVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

AccelEfctvPos						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **AccelEfctvPosET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	0.392157	0	%

AirbagDpl						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **AirbagDplET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	1			True
Logical Value	0			False

AirbagDplInvsn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: Airbag Deployed Inversion

Encoding type:

Name: **AirbagDplinvsnET**

Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Airbag Deployed
Logical Value	1			No Airbag Deployed

BCMAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **BCMAvlblyET**

Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

BPMMstrAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **BPMMstrAvlblyET**

Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

BrkPdlDrvrAppdPrs						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**BrkPdlDrvrAppdPrsET**				
	Size:	8 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 255	75	0	kPa

BrkPdlDrvrAppdPrsAlvRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**BrkPdlDrvrAppdPrsAlvRCET**				
	Size:	2 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 3	1	0	

BrkPdlDrvrAppdPrsV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**BrkPdlDrvrAppdPrsVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

CalendarDay						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
5	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **CalendarDayET**
Size: 5 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 31	1	0	days

CalendarMonth						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **CalendarMonthET**
Size: 4 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Unknown
Logical Value	1			January
Logical Value	2			February
Logical Value	3			March
Logical Value	4			April
Logical Value	5			May
Logical Value	6			June
Logical Value	7			July
Logical Value	8			August
Logical Value	9			September
Logical Value	10			October
Logical Value	11			November
Logical Value	12			December

CalendarYear						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **CalendarYearET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	1	2000	year

ChLKAAlvRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:

Name: **ChLKAAlvRCET**
Size: 4 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 15	1	0	

ChLKACtrlSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:

Name: **ChLKACtrlStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	4			pre-condition not satisfied
Logical Value	0			No request
Logical Value	1			Request honored
Logical Value	2			lost arbitration
Logical Value	3			control not allowed for failure
Logical Value	5			reserved
Logical Value	6			reserved
Logical Value	7			reserved

ChLKARespToq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
11	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:

Name: **ChLKARespToqET**
Size: 11 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 2047	0.01	-10.24	Nm

ChLKARespToqPV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:

Name: **ChLKARespToqPVET**
Size: 15 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 32767	1	0	

ChLKARespToqV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:

Name: **ChLKARespToqVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

ClstrDspdVehSpd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **ClstrDspdVehSpdET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 254	1	0	km/h
Logical Value	255			Speed Signal Missing Error of SCS

DiagnosticFuncAddrReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
64	Bytes	State	Sporadic	DIAG_FuncReq_HSC2	No	0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	5.000	50.000	
	FM_Quiet_HS	5.000	50.000	
	FM_Silent_HS	5.000	50.000	
Description:	Diagnostic functional address request			

DiagnosticReqFVCM						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
64	Bytes	State	Sporadic	DIAG_PhysReq_FVCM	No	0x00 0x00 0x00 0x00 0x00 0x00 0x00 0x00

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	5.000	50.000	
	FM_Quiet_HS	5.000	50.000	
	FM_Silent_HS	5.000	50.000	
Description:	Diagnostic request to FVCM			

DipdBeamLghtOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **DipdBeamLghtOnET**

Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

DircnIndLampSwSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **DircnIndLampSwStsET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			off
Logical Value	1			Left on
Logical Value	2			Right on
Logical Value	3			reserve

DrvrSbltAtc						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **DrvrSbltAtcET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

DrvrSbltAtcV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **DrvrSbltAtcVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

DrvrStrgDlvrdToq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
11	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:						
	Name:	**DrvrStrgDlvrdToqET**				
	Size:	11 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 2047	0.01	-10.24	Nm

DrvrStrgDlvrdToqV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	50.000	

Encoding type:						
	Name:	**DrvrStrgDlvrdToqVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

DspMeasSys						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**DspMeasSysET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			kph
		Logical Value	1			mph

ECMAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **ECMAvlblyET**
Size: 1 bit

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			False
	Logical Value	1			True

En12VoltStrMotCmddOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **En12VoltStrMotCmddOnET**
Size: 1 bit

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			False
	Logical Value	1			True

EnASSSta						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EnASSStaET**
Size: 2 bits
Description: Engine Auto Stop Start State ET

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			Engine Off
	Logical Value	1			Engine Running
	Logical Value	2			Engine Starting
	Logical Value	3			Engine Stopping

EnRunA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EnRunAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

EnSpd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
16	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EnSpdET**
Size: 16 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 65535	0.25	0	rpm

EPTAccelActuPos						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EPTAccelActuPosET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	0.392157	0	%

EPTAccelActuPosV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EPTAccelActuPosVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

EPTAccelEfctvPos						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EPTAccelEfctvPosET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	0.392157	0	%

EPTBrkPdlDscrtInptSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **EPTBrkPdlDscrtInptStsET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Brake Not Applied
Logical Value	1			Brake Applied

EPTBrkPdlDscrtInptStsV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Electric Powertrain Brake Pedal Discrete Input Status Validity

Encoding type:	Name:	**EPTBrkPdlDscrtInptStsVET**			
	Size:	1 bit			
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

EPTRdy						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:	Name:	**EPTRdyET**			
	Size:	1 bit			
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Not ready
		Logical Value	1			Ready

EPTStCmdOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:	Name:	**EPTStCmdOnET**			
	Size:	1 bit			
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

FICMAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **FICMAvlblyET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

FrtFogLghtOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **FrtFogLghtOnET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

FrtWiperParkPosA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: Front Wiper Park Position Active
Wiper Park Position for the Front wiper

Encoding type:

Name: **FrtWiperParkPosAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

FrtWiperSwSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: Front Wiper Switch Status

Encoding type:

Name: **FrtWiperSwStsET**
Size: 2 bits

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			wipers off
	Logical Value	1			wipers in intermittent mode
	Logical Value	2			wipers in slow mode
	Logical Value	3			wipers in fast mode

FrtWshrPumpA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: Front Washer Pump Active

Encoding type:

Name: **FrtWshrPumpAET**
Size: 1 bit

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			False
	Logical Value	1			True

HCUAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: HCU Available

Detect if specific ECU is available according to node missing strategy by gateway ECU.

Encoding type:

Name: **BooleanET**
Size: 1 bit
Description: boolean value

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	1			True
	Logical Value	0			False

HourOfDay						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
5	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**HourOfDayET**				
	Size:	5 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 23	1	0	

IPCAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**IPCAvlblyET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

LDircnIndLghtF						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**LDircnIndLghtFET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

LDircnIO						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **LDircnIOET**
Size: 1 bit

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			False
	Logical Value	1			True

LDrvnWhlRotlDircn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	3

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **LDrvnWhlRotlDircnET**
Size: 2 bits

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			Unknown
	Logical Value	1			Forward
	Logical Value	2			Backward
	Logical Value	3			Initial/Invalid

LDWAdoWrnngReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **LDWAdoWrnngReqET**
Size: 2 bits

Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
	Logical Value	0			no request
	Logical Value	1			off
	Logical Value	2			on
	Logical Value	3			reserved

LDWLKAHapticWrnngReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Lane Departure Warning Lane Keeping Assist Haptic Warning Request

Encoding type:

Name: **LDWLKAHapticWrnngReqET**

Size: 2 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			off
Logical Value	2			on
Logical Value	3			reserved

LDWLKASwReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Lane Departure Warning Lane Keeping Assist Switch Request

Encoding type:

Name: **LDWLKASwReqET**

Size: 3 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			off
Logical Value	2			LDW
Logical Value	3			LDP
Logical Value	4			LKA

LDWSnstvtLvlReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **LDWSnstvtLvlReqET**

Size: 2 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			Low
Logical Value	2			Standard
Logical Value	3			High

LNonDrvnWhlRotlDircn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	3

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **LNonDrvnWhlRotlDircnET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			No moving
Logical Value	1			Moving forward
Logical Value	2			Moving backward
Logical Value	3			Error/Invalid

MainBeamLghtOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **MainBeamLghtOnET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

MinuteOfHour						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
6	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **MinuteOfHourET**
Size: 6 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 59	1	0	

OtsdAirTemCrVal						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**OtsdAirTemCrValET**				
	Size:	8 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 255	0.5	-40	degC

OtsdAirTemCrValV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**OtsdAirTemCrValVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

PtBrkPdlDscrtInptSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**PtBrkPdlDscrtInptStsET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Brake Not Applied
		Logical Value	1			Brake Applied

PtBrkPdlDscrtInptStsV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **PtBrkPdlDscrtInptStsVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

PwrMdMstrAccryA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **PwrMdMstrAccryAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Inactive
Logical Value	1			Active

PwrMdMstrRunCrkA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **PwrMdMstrRunCrkAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Inactive
Logical Value	1			Active

RDircnIndLghtF						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RDircnIndLghtFET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

RDircnIO						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RDircnIOET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

RDrvnWhlRotlDircn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	3

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RDrvnWhlRotlDircnET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Unknown
Logical Value	1			Forward
Logical Value	2			Backward
Logical Value	3			Initial/Invalid

RNonDrvnWhlRotlDircn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	3

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RNonDrvnWhlRotlDircnET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			No moving
Logical Value	1			Moving forward
Logical Value	2			Moving backward
Logical Value	3			Error/Invalid

RrFogLghtOn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RrFogLghtOnET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

RstrFctryDeftsReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **RstrFctryDeftsReqET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

SDMAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SDMAvlblyET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

SDMRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SDMRCET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 3	1	0	

SecsOfMinute						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
6	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SecsOfMinuteET**
Size: 6 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 59	1	0	

SpdAstMdECM						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SpdAstMdECMET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			SLIF
Logical Value	2			MSA
Logical Value	3			ISA

SpdAstSysStsECM						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SpdAstSysStsECMET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Active (Limiting)
Logical Value	2			Standby
Logical Value	3			Entry Conditions Incorrect
Logical Value	4			Overspeed
Logical Value	5			Fault
Logical Value	6			Active (Passive)
Logical Value	7			Reserved

SpdAstSysTrgtSpd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SpdAstSysTrgtSpdET**
Size: 15 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 32767	0.015625	0	

StrgWhlAng						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
16	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngET**
Size: 16 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	65535			error mark
Physical Range	0 - 65534	0.0625	-2048	degree

StrgWhlAngAlvRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngAlvRCET**
Size: 4 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 15	1	0	

StrgWhlAngExtdPV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
16	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngExtdPVET**
Size: 16 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 65535	1	0	

StrgWhlAngGrd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
12	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngGrdET**
Size: 12 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	4095			error mark
Physical Range	0 - 4094	1	-2048	degree/s

StrgWhlAngSnsrCalSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngSnsrCalStsET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Unknown
Logical Value	1			Estimated
Logical Value	2			Calibrated
Logical Value	3			Unknown

StrgWhlAngSnsrChksm						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **StrgWhlAngSnsrChksmET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	1	0	

StrgWhlAngSnsrFlt						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**StrgWhlAngSnsrFltET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

StrgWhlAngSnsrInid						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**StrgWhlAngSnsrInidET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

StrgWhlAngSnsrMultCapb						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**StrgWhlAngSnsrMultCapbET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

StrgWhlAngV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**StrgWhlAngVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

SysBPM						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**SysBPMET**				
	Size:	2 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Off
		Logical Value	1			ACC
		Logical Value	2			Run
		Logical Value	3			Crank Request

SysBPMEnbd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**SysBPMEnbdET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			False
		Logical Value	1			True

SysOpnlMd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysOpnlMdET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Normal Mode
Logical Value	1			Manufacturing Mode
Logical Value	2			Transit Mode
Logical Value	3			Show Room(Reserve)
Logical Value	4			Storage Mode
Logical Value	5			Diagnosic or Reprogramming(Reserve)

SysPwrMd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysPwrMdET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Accessory
Logical Value	2			Run
Logical Value	3			Crank Request

SysVol						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysVolET**
Size: 8 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 255	0.1	3	V

SysVolMd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysVolMdET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Normal
Logical Value	1			Low System Voltage
Logical Value	2			High System Voltage
Logical Value	3			Illegal System Voltage

SysVolMdV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysVolMdVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

SysVolV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **SysVolVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

TBOXAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TBOXAvlblyET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

TCMAvlbly						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TCMAvlblyET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

TCSA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TCSAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

TCSOpngMd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TCSOpngMdET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Normal
Logical Value	2			Off Road

TCSOpngSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TCSOpngStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Inactive
Logical Value	1			Active
Logical Value	2			Fault

TJAICASwReq						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description: Traffic Jam Assist Integrated Cruise Assist Switch Request

Encoding type:

Name: **TJAICASwReqET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			no request
Logical Value	1			off
Logical Value	2			on
Logical Value	3			reserved

TrEstdGear						
Size [bits] 4	**Type** Unsigned	**Info Type** State	**Generation Type** Periodic	**Group Name** N/A	**Update Bit** No	**Initial Value** 0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TrEstdGearET**

Size: 4 bits

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Not Supported
Logical Value	1			First Gear
Logical Value	2			Second Gear
Logical Value	3			Third Gear
Logical Value	4			Fourth Gear
Logical Value	5			Fifth Gear
Logical Value	6			Sixth Gear
Logical Value	7			Seventh Gear
Logical Value	8			Eighth Gear
Logical Value	13			Neutral Gear
Logical Value	14			Reverse Gear
Logical Value	15			Park Gear

TrEstdGearV						
Size [bits] 1	**Type** Unsigned	**Info Type** State	**Generation Type** Periodic	**Group Name** N/A	**Update Bit** No	**Initial Value** 0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TrEstdGearVET**

Size: 1 bit

Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

TrgtSpdSrcSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TrgtSpdSrcStsET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Undefined
Logical Value	1			Camera
Logical Value	2			Navigation
Logical Value	3			Fault

TrShftLvrPos						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TrShftLvrPosET**
Size: 4 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Between Ranges
Logical Value	1			Park Range
Logical Value	2			Reverse Range
Logical Value	3			Neutral Range
Logical Value	4			Forward Range A
Logical Value	5			Forward Range B
Logical Value	6			Forward Range C
Logical Value	7			Forward Range D
Logical Value	8			Forward Range E
Logical Value	9			Forward Range F
Logical Value	10			Forward Range G
Logical Value	11			Forward Range H
Logical Value	15			Lever Position Unknown

TrShftLvrPosV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **TrShftLvrPosVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VehDynYawRate						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
12	Signed	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehDynYawRateET**
Size: 12 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	-2048 - 2047	0.0625	0	deg/s

VehDynYawRateV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehDynYawRateVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VehOdo						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
24	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehOdoET**
Size: 24 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 16777215	1	0	

VehOdoV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehOdoVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VehSideLghtSts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
2	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehSideLghtStsET**
Size: 2 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			No side light on
Logical Value	1			Left side light on only
Logical Value	2			Right side light on only
Logical Value	3			All side light and license plate light on

VehSpdAvg						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VehSpdAvgET**				
	Size:	15 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 32767	0.015625	0	km/h

VehSpdAvgAlvRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VehSpdAvgAlvRCET**				
	Size:	4 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 15	1	0	

VehSpdAvgDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VehSpdAvgDrvnET**				
	Size:	15 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 32767	0.015625	0	km/h

VehSpdAvgDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehSpdAvgDrvnVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VehSpdAvgNonDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
15	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehSpdAvgNonDrvnET**
Size: 15 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	0 - 32767	0.015625	0	km/h

VehSpdAvgNonDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VehSpdAvgNonDrvnVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VehSpdAvgPV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
16	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VehSpdAvgPVET**				
	Size:	16 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 65535	1	0	

VehSpdAvgV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VehSpdAvgVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

VSELatAcc						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
12	Signed	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**VSELatAccET**				
	Size:	12 bits				
	Description:	Vehicle Stability Enhancement Lateral Acceleration ET				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	-2048 - 2047	0.015625	0	m/s^2

VSELatAccV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSELatAccVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VSELongtAcc						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
10	Signed	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSELongtAccET**
Size: 10 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Physical Range	-512 - 511	0.03	0	m/s^2

VSELongtAccV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSELongtAccVET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Valid
Logical Value	1			Invalid

VSEMd						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSEMdET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Off
Logical Value	1			Normal
Logical Value	2			Competitive

VSESts						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
3	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSEStsET**
Size: 3 bits
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			Inactive
Logical Value	1			Active
Logical Value	2			Fault
Logical Value	3			Warming Up
Logical Value	4			Not Ready

VSESysA						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Boolean	State	Periodic	N/A	No	false

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:

Name: **VSESysAET**
Size: 1 bit
Values:

Type	**Value**	**Scale**	**Offset**	**Interpretation**
Logical Value	0			False
Logical Value	1			True

WhlGndVelDrvnChksm						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelDrvnChksmET**				
	Size:	8 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 255	1	0	

WhlGndVelDrvnRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelDrvnRCET**				
	Size:	4 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 15	1	0	

WhlGndVelLDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
14	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelLDrvnET**				
	Size:	14 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 16383	0.03125	0	km/h

WhlGndVelLDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Wheel Ground Velocity Left Driven Validity

Encoding type:	Name:	**WhlGndVelLDrvnVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

WhlGndVelLNonDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
14	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:	Name:	**WhlGndVelLNonDrvnET**				
	Size:	14 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 16383	0.03125	0	km/h

WhlGndVelLNonDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Wheel Ground Velocity Left Non Driven Validity

Encoding type:	Name:	**WhlGndVelLNonDrvnVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

WhlGndVelNonDrvnChksm						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
8	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelNonDrvnChksmET**				
	Size:	8 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 255	1	0	

WhlGndVelNonDrvnRC						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
4	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelNonDrvnRCET**				
	Size:	4 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 15	1	0	

WhlGndVelRDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
14	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:						
	Name:	**WhlGndVelRDrvnET**				
	Size:	14 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 16383	0.03125	0	km/h

WhlGndVelRDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Wheel Ground Velocity Right Driven Validity

Encoding type:	Name:	**WhlGndVelRDrvnVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

WhlGndVelRNonDrvn						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
14	Unsigned	State	Periodic	N/A	No	0

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Encoding type:	Name:	**WhlGndVelRNonDrvnET**				
	Size:	14 bits				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Physical Range	0 - 16383	0.03125	0	km/h

WhlGndVelRNonDrvnV						
Size [bits]	**Type**	**Info Type**	**Generation Type**	**Group Name**	**Update Bit**	**Initial Value**
1	Unsigned	State	Periodic	N/A	No	1

Timings:	**Interface Mode/FuncVerFolder/Function**	**Sub. Latency [ms]**	**Max. Age [ms]**	**Read Interval [ms]**
	FM_Normal_HS	10.000	500.000	

Description:	Wheel Ground Velocity Right Non Driven Validity

Encoding type:	Name:	**WhlGndVelRNonDrvnVET**				
	Size:	1 bit				
	Values:	**Type**	**Value**	**Scale**	**Offset**	**Interpretation**
		Logical Value	0			Valid
		Logical Value	1			Invalid

4.5 Constant signals

NCFRefNoFVCM			
Size [bits] 64	**Type** Bytes	**Info Type** State	**Initial Value** 0x61 0x01 0x31 0x10 0x40 0x35 0x70 0x04
Description:	NCF reference number for FVCM		