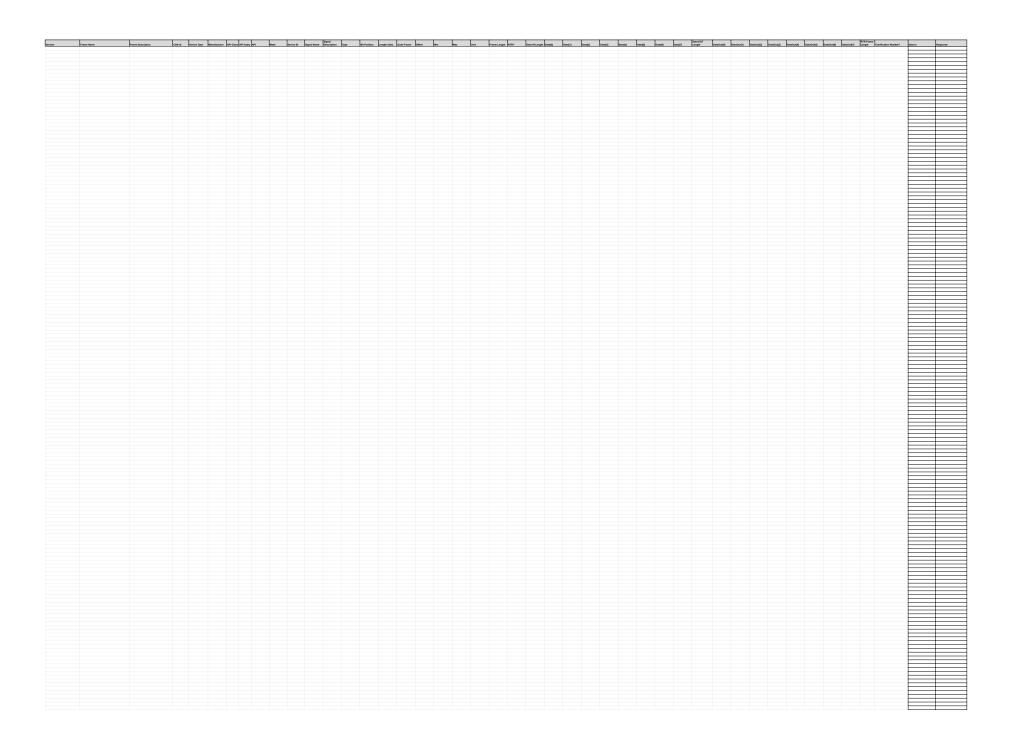
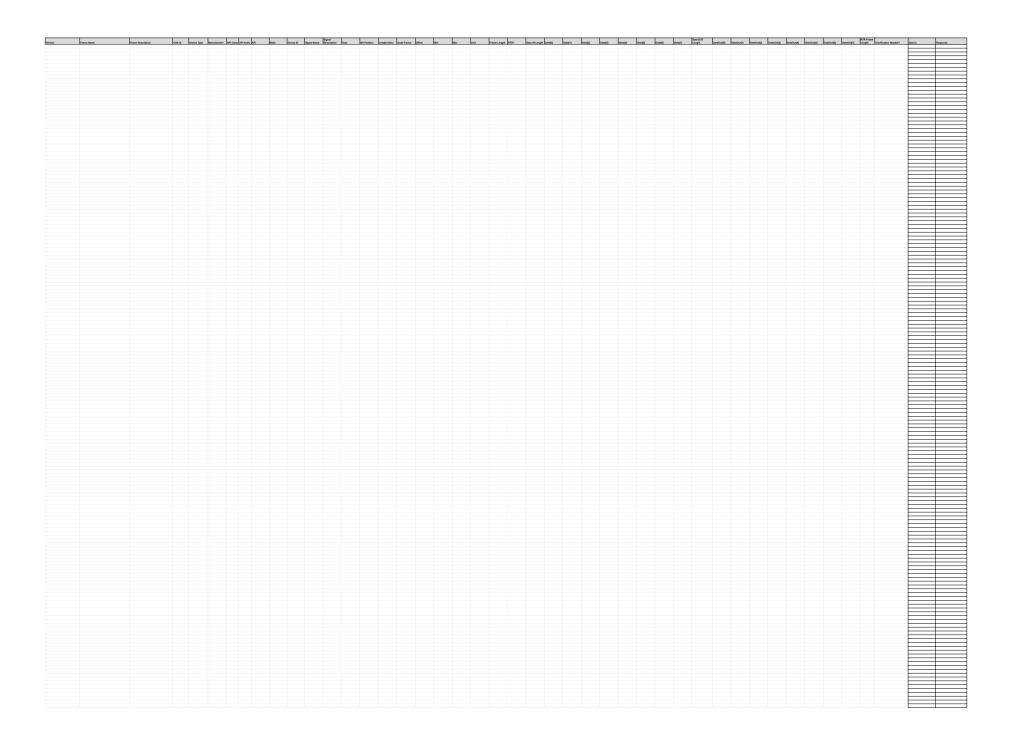
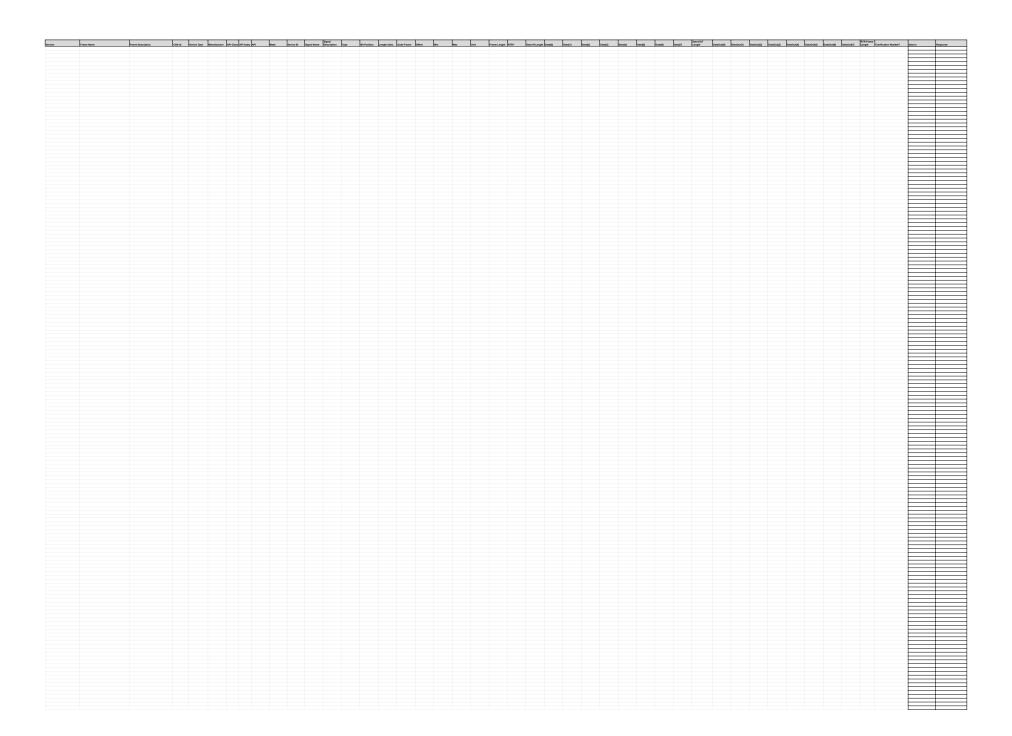
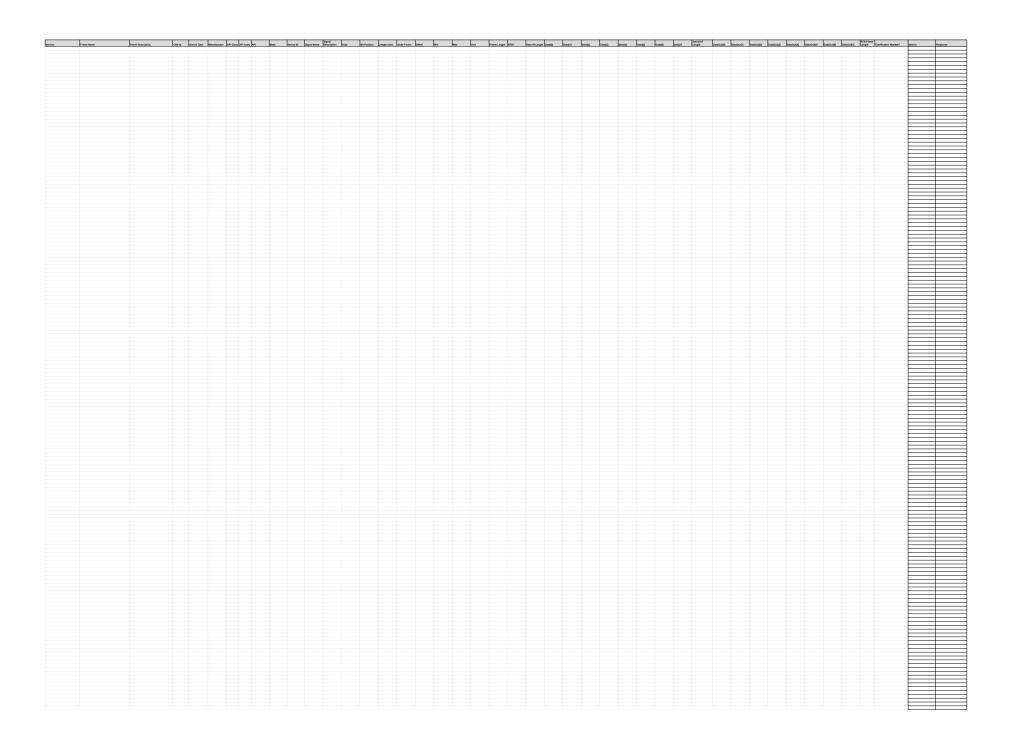
Version	Frame Name	Frame Description Device shall disable immediately when	CAN Id De		afacturer API CI	Class API Index	API Mask	Owvice I	D Signal No	Signal une Description	Туре	Bit Position L	Length (bits)	Sicale Factor	Offset 6	Min. M	tax e	ook Fr	rame Length R	FR? Onto IN L	Length Data(8)	ucu(1) Ducu(2)	(Data(3)	Data(4)	Outs(E) Outs(	Osta[7]	Data OUT Length	Outs/Out[0]	OstaOut[1] O	araOut[2] D.	имочера с	OutsOut(4)	DataOut[S]	DutaOut(6)	DataOut(7) Li	TR Frame ength Clark	Ification Needed?	Duta in	Response
0.01	Broadcast Disable	Cevice shall disable immediately when this meesage is recleved. Upon receiving this meesage the notice combiler will also diviling the motor and go to a neural state. The motor can not be driven again until either a System Reset or System Resume has been received.	0000000 600	wice@roadcast broad	down		0x00	0 ALL (gn	ored)									_	_							-	+								-+	Not it	implemented by NI	0 Byte Request	None
0.0.1	Broadcast System Halt	go to a neutral state. The motor can not be driven again until either a System Reset or System Resume has been received.	0000000 da	wice@roadcast broso	écast	0 1	0x01	Individua 64 Device																												Curre	ently the same as Disable	O Styte Request	None
0.0.1	Setpoint Set	Run the currently set control mode	2050000 mo	starController REV			duds :	64 Device individua (3882176) Device	d Sespoint	Setpoint values see floatingoint.	ig foat		32								# Targe(0)	arge(1) Targe(2)	Target(3)	Augg	[7:3]R [2]Art [4:4] [4:4] [4:4]	served F Units [15] revd									$\Box$			Setpoint Frame	None
										Setpoint value as see floating point.  Arbitrary feedforward value is added to the motor output. Units are default to Voter and cause set by the ArbiF units.	d																												
										are default to Volte' and ca be set by the	-																												
			20500e0 20500e0 20500e0	_	_				Feedfored ArbFF Un PID Stat	Action units and field.	signed unsigned unsigned	32 50	16	0.0009765625			-	bits	- 1								+								=	_			
		This command is used to set the output duty cycle of the motor controller in duty cycle control mode. The first parameter is a 20-01 IEEE floating point number that specifies the output duty cycle and direction, visid range for this control mode are [-1 1].											-																										
0.01	Duty Cycle Set	is a 22-bit IEEE floating point number that specifies the output duty cycle and direction. Valid range for this control mode are I-1 11.	2050080 mo	sturController REV			0402 1	Individua 13882240 Device	e Setoors	Sespoint value as see floati spint. Archivery fleedforward value is addor on the motor output. Units are default of Voter and can be set by the Archive white seed of Sespoint value. Sespoint value.	e In		32			-1	100	Perpert			# Target(I)	aroed1) Target(2)	TarpetSI	Aurio I	7-398 21An Aud'1 9250	served F Links												Setpoint Frame	None
										Attitrary feedloward value is adde	a																												
										output. Units are default to Volts' and ca																													
			2050080 2050080	_	_	$\perp$		_	Arbitrary Feedfored ArbFF Un	Artiff units and field.	signed unsigned	32 50	16	0.0009765625				bits						$\vdash$		_	_	-		$\rightarrow$						_			
			2050080						PID Skit	Setpoint value as see floating point. Units a specified by it will paramete a specified by it will paramete a specified by it will be paramete a specified by the specific send value is set by the set by the ANSP units are default to Yotif and the set by the ANSP units sed default to Yotif and ANSP units sed of set by the ANSP units sed.	unsigned e	48	2																						$\equiv$				
0.0.1	Welcothy Set	Sets the closed loop speed controller, unit is 10-bit ISSS floating point number representing the target speed in RPM	2050480 ma	storController REV		1 2	duct2 1	Individua 13893264 Device	d Setpoint	specified by t unit paramete default is RPI	te he if float		32					ielocity Units			#(Targe(0)	arge(1) Targe(2)	Target(3)	Ausg	(7-3)0 (2)Art (4) (2) (2)	sarved IF Linits [1:0] revd												Setpoint Frame	None
										Arbitrary feedforward value is adde	4																												
										output. Linits are default to Volte' and ca																													
			20504B0 20504B0	_	_	$\perp$		_	Attitrary Feedforws AttFF Un	Artiff units field.	signed unsigned	32	16	0.0008765625		_		bits	-					$\vdash$			_	_		_						_			
		Sets the closed loop speed controller, unit is 10-bit ISSS floating point number	2050480						PD Sut	Setpoint values see fostingoint. Units a specified by t	unsigned e	48	2																										
0.0.1	Smart Velocity Set	Sats the closed loop speed controller, unit is 20-bit SEES floating point number representing the target speed in RPM. Honors the max acceleration and max velocity from the Smart Motion parameters.	20504C0 ma	storController REV		1 3	deria i	Individua 13883328 Device	d Setpoint	point. Units a specified by t unit paramets default is RPI	ne he ii. iii ficat		32					ielocity Units			#(Targe(0)	arge(1) Targe(2)	Target(3)	Ausg	(7:3)R (2) Art (4) (2) (2) (3)	served IF Units [1:0] revd													
									T	Arbitrary feedbrased value is adde	a																												
										output. Units are default to Volte' and ca	.[																								. 1				
					_	$\perp$		$\bot$	Arbitrary Feedforws ArbFF Un	apached by it unit paramete default is RPI Arbitrary feedforward value is added to the motor output, Links are default to Voter and cap set by the ArbiF units and field. Its	signed unsigned	32 50	16	0.0009765625				iots .			$\perp$			$\perp$				<b>L</b>		+									
				=	$\neg$			=	PID Skit	Sepoint value Sepoint value se lease floation point. Union a specified by st unit paramete default is extrations Arbibrary floationard value is adde to the motor output. Union are default to Volot' and Arbibrary default set by the Arbibrary default set of default set by the Arbibrary default set by the default set by the Arbibrary default d	unsigned	48	ž				$\dashv$	$\exists$	-					$\Box$						=	$\exists$				=	=			
		Sets the closed loop speed controller, unit is 22-bit IEEE floating point number representing the target position in						Indvidu		point. Units a specified by t unit paramets default is	ne K														77-319A 21,Ad	served IF Units [13] revd													
0.0.1	Position Set	estations	2050CB0 mo	storController REV	$\dashv$	3 2	0x32	13885312 Device	Setpoint	Arbitrary feedforward ygins in a fin-	float	1	32					osition Units	-		# Target(0)	arge(1) Targe(2)	Target(3)	Augg	Au(1) pitšis	[0.1] [0.1]	+	$\vdash$	$\vdash$	$\dashv$					$\rightarrow$	$\dashv$		Setpoint Frame	None
										to the motor output. Units are default to																													
									Arbitrary Feedfores	voter and ca be set by the Artiff units field.	signed	32	16	0.0009765625				oits																					
				=T	Ŧ			F	PD Skit	šetpoint valu	unsigned unsigned	50 48	1 2		=	Ŧ	一丁	Ŧ	-		+			Ħ			+=		Ħ	干	一丁		=	目	Ŧ	Ŧ			
		Sets the closed loop speed controller.								Setpoint value as less floati point. Units a specified in volts. This is i open loop de fibrians' fibrians	10 10 10														7:38	served													
0.0.1	Voltage Set	Sets the closed loop speed controller, unit is 20-bit ISSS floating point number representing the target voltage in volts.	2051080 mo	storController REV		4 2	0x42 :	Individua ISB86236 Device	Setpoint	open loop command Arbitrary	ficat	۰	32					bits		_	# Targe(0)	arge(1) Targe(2)	Target(3)	Aug	Augi) pitin	served F Units [1:0] revd	-			-					$\rightarrow$	_		Setpoint Frame	None
										value is adde to the motor output. Units	4																												
									Athray	Voter and ca be set by the ArbFF units	1																												
									ArbFF Un PID Stat	and Seld.	unsigned unsigned unsigned	50 60	16 1 2	0.0009765625				bits	-																=				
		Sets the closed loop speed controller, unit is 30-bit ISSE floating point number representing the target current in Amps.						Individua	.	Sepoint values as mee foosite upon as mee foosite unit units a specified in amps.  Arbitrary fleed forward value is adde to the motor output. Units are default to Volte' and ca be set by the Arbitr units feld.	9														(7:3)R (2)Ac	served F Units [1:0] revd													
0.0.1	Current Set	representing the target current in Amps.	20510C0 ma	sturController REV		4 3	dut3 :	13886400 Device	Setpoint	Atlany Redonard	foat		32					kmps			# Targe(0)	arge(1) Targe(2)	Target(3)	Augg	Augij pitšis	[0.1] revd									-				
										to the motor output. Units are default to																													
									Arbitrary Feedfores	be set by the ArbFF units and field.	signed	32	16	0.0009765625				iots																					
				_					PID Skit			50 48	2					_	8	_															$\equiv$	_			
		Sets the closed loop smart motion compiler, unit is 20-bit IEEE floating point representing the target position in rotations.								Setpoint values ince footis point. Units a specified by turit paramets	ig in to														7:38	served													
0.0.1	Smart Motion Set	point representing the target position in rotations.	2051480 ma	storController REV	_	\$ 2	0x52 1	13887360 Device	d Sespoint	default is rotations Arbitrary	foat	0	32			_	e	Osition Units			& Target(0)	large(1) Targe(2)	Target(3)	Augg	Augi piški	served F Units [1.0] revd	_	-	$\vdash$	-				_	$\rightarrow$	_			
										value is adde to the motor output. Units	4																												
									Athray	unit paramete default is stations Arbitrary beedforward value is adde to the motor curput. Units are default to Volter and ca pas set by the ArbFF units and feld.	·L																								. 1				
				=	$\pm$				AttFF Us PID Stat	is sec	unsigned unsigned	50 50	16	-3000/mse25			-	-						=				=							=				
0.0.1	Periodic Status 0	Set etatus frame period - default 10ms	2051800 mo	storController REV			dwiso :	individus casse256 Device	Applied O	Actif units field.  Actif units field.											Frame Period   2 ms[0]	came Period se[1]						Applied Output 6 LSB	Applied Output F	auts LSB Fr	auts MSG C	iticky Faults	Sticky Faults MSB	Rend	invest@rake Settings, is Follower	No re trame	exponse to calling this e direction. Status 0 e out is periodic	Status in Frame (Set frame period)	None
				$\rightarrow$	$\Rightarrow$			-	Sticky Fau Is Follows	r							=	=	=					=	=		-								$\equiv$	=			
		Set status frame period - default 20ms			$\neg$			12898320 Device	pérake Cos		1										Frame Perio*	rame Period se[1]		$\Box$				Motor Wesch-	Motor Velocity	totar Velocity M	latar Velocity	Autor	Motor Voltage LSS	Motor Current LSB 4 bits Motor Voltage	Motor Current	-		Status in Frame (Set	
0.0.1	Periodic Status 1	All data is 16-bit half precision numbers	2051960 ma	storController REV	$\perp$	4 1	delit :	13888320 Device	Welcolly Motor Temperati Sus Volta												2 ma[0]	w[1]						en.sa	MO,L N	ю,н —,	58 T	Semperature 1	LSS	MSS 4 bits	150			frame period)	None
		Set user frame period - default 0	H	_	$\pm$	+1		$\pm$	1000	pe next		=	=	=	=	=	=	=	=		+			$\vdash$					H	=	=			=	=f	=			
0.0.1	Periodic Status 2	Set user frame period - default 0 (disabled) Each user frame can output four 16-bit parameters Set user frame period - default 0 (disabled) Each user frame-can output four 16-bit parameters	2051880 mo	storController REV	_	6 2	042 1	Individua Device	POSIGN	_	1	$\sqcup$										rame Period se[1]	_	$\perp$		_	_	Motor Position 8 LSB	Motor Position In MID_L In add/violage 20 <sup>4</sup>	totar Position M IIO_H M	istor Position SB F	evo i	RSVD	ksvo s	RSVD				
140	Periodic Status 3	(disabled) Each user frame can output four 16-bit parameters	20519C0 mo	sturController REV		4 3	0x60 1	Individua 13888448 Device		dage	1										Frame Period 1 2 ms[0]	rame Period se[1]						adcVoltage 2q8 8 (7:0)	adcivoltage Soli [8:9] analogivelocity a 15q7[0:7]	nalog/lelocity ar Sq7[ii:15] 15	nalog/felocity a Sq7[56:22] 8	enalogPos CSS Float LSB 1	analogPos IEEE Float MID LOW	enalogPos ESE Float MD a HIGH	snalogPos (EEE Float MSB				
		Set user frame period - default 0 (disabled) Set user frame-can output four 16-bit parameters		$\rightarrow$	+				Analog Ve	socity selficit	+						_	_	_					$\vdash$				_		-					=	_			
150	Periodic Status 4	Each user frame can output four 16-bit parameters	2051900 ma	otorController REV	+	4 4	Dalid :	individus (3888512 Device	Alternate Encoder Velocity Alternate Encoder Position		1	$\vdash$					$\rightarrow$				Frame Period 1 2 ms[0]	rame Period ns[1]	+	$\vdash$			+	velocity IEEE 8 Float LSB	alt encoder as velocity IEEE u Float MID LOW F	Hooky IEEE H	t encoder slocity IEEE as lost MSB 8	alt encoder pos CCC Float LSB	alt encoder pos IEEE Float MID LOW	EEE Float MID II	it encoder pos EEE Float MSB	+			
$\vdash$		The first four bytes contain the status fourth from the COL of the DV-	$\vdash$	-	+	+		+	Encoder Position	+	+	$\vdash$				-	-+	$\rightarrow$	$\rightarrow$	_	+		+	$\vdash$		+	+	-	$\vdash$	$\rightarrow$	-				$\rightarrow$	_			
		The first four bytes contain the status directly from the SPI of the DRVRIDX (\$7470 and STAT 1). See distances for more details they livew, convibit sleymink drvRDD pdf									1																								. 1				
		The second 4 bytes contain the faults and sticky faults as a way to poli instead of selying on the periodic messages.						Individua	ii Gate Driv	.	1																							Sticky Faults 1	Sticky Faults	Statu	us from SPI of DRV and		
100	DRV Status	пенаде.	2051A80 mo	storController REV	$\perp$	4 10	DelA :	DESERBE DEVICE	d Gate Driv STATO Gate Driv STAT1 Faults Sticky Fau	и																		BISTATO LSB	STATO MSB S	TAT1 LSB S	TAT1 MSG F	auto LSB I	Faults MSB	LSB	150	faults		O Byte Request	DRV Status Frame
	Non-Fords				$\pm$	Ħ		indvidus (3889/152 Device	Faults Sticky Fau	ds		H	=	=	=	=	=	=	=	_				+1					Ħ	=	=	=		=	=f	===			
100	Config Burn Flash	Clear sticky faults. Surns fash updating only parameters that changed. Can only be done when device is not enabled (for now?).	2051280 mo 2051280 mo	storContoller GCV		7 .	0/2	Individual			1										2043	KAA.		$\Box$											$\neg$			O Byte Request	None
100	Set Follower Mode			uturController REV		7 3	0/23	Individua (3889408) Device Individua (3889472) Device	Fallower I	d Config											# FollowerD(0)	olowerD(1) FollowerD(	2) FollowerD(3)	FollowerCfg[0]	FollowerCtg[1] Follow	rClg[2] FollowerCl	1970	8 Follower(D)()	Follower(D(1) F	olove10(2) Fo	olowerD(3)	-slowerClg[0]	FollowerCfg[1]	FollowerCfg[2]	FollowerCfg[3]	ls Foi shoul	slower bit of status frame aid indicate success	& Byte Request	None
		Reset most parameters to their factory defaults - This API does nt outmantle certain parameters outlined in the parameter table. Send a boolean 'True' to also burn the parameter table.						1																															
100	Config Factory Defaults	parameter table. Send a boolean 'True' to also burn the parameter table.	2051000 ma	storController REV	$\rightarrow$	7 4	8x74 :	13889536 Device	Flash	3	+	$\vdash$									S Sturn Table?	٥	0 1	o Sooi		_	+	$\vdash$	$\vdash$	_					$\Rightarrow$	$\rightarrow$			
100	Config Factory Reset	Seest all parameters to their factory defaults, this include CAN ID and others. Send a boolean "Itue" to also burn the parameter table.	2051D40 mo	sturController REV	$\perp$	7 5	0:75	indvidus (SBSSSCO Device	d Gurr Res Flash	et to	$\perp$									L	5 Sum Table?			Parameter Type 0 Bool		$\perp$	$\perp$	$\perp$											
150	identify	Present a visual blink code on the LEDs to identify a particular device	2051080 ma	sturController REV		7 6	0.76	Indvidus 13889664 Device	d Unique ld	3							$\equiv$		$\equiv$		Unique ID (F 4 CAN ID = 0(0)	Inique ID (F Unique ID ) AN ID = 0((1) OAN ID = 0	f   Unique ID (f (Z)   CAN ID = 0(D)							$\equiv$					$\equiv$	$\equiv$			

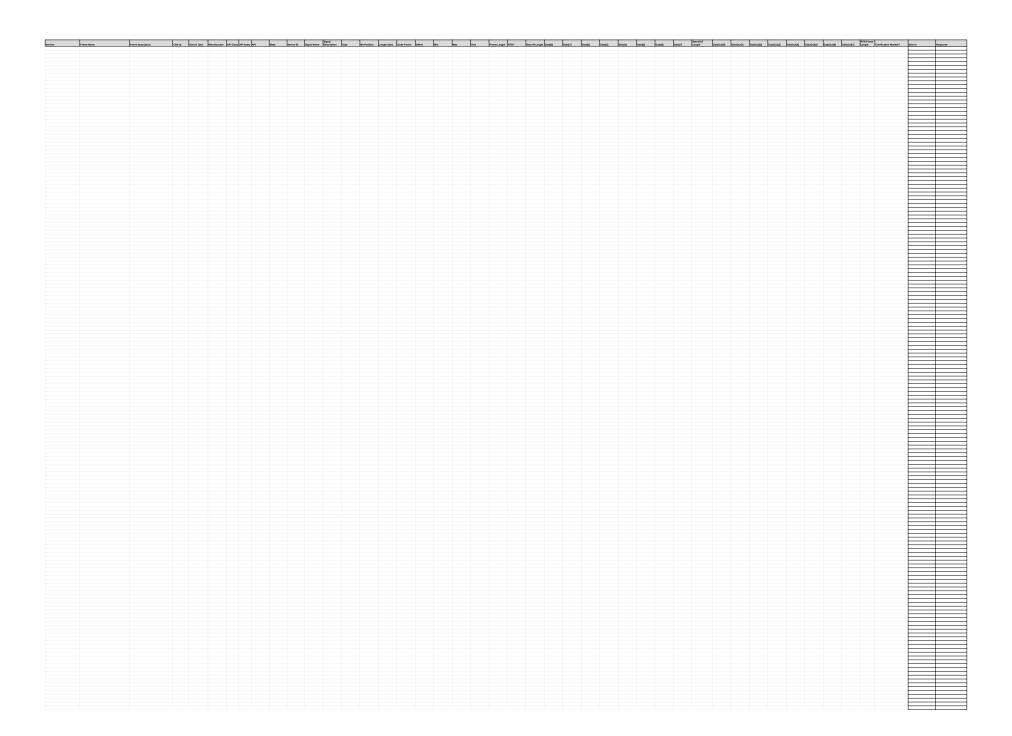
Maraine	Frame Name	Energy Page (Service To All Maries To All Ma	na Massaturanus d	Ol Class Add Index	ADI Mark	Ometra D	Sincel Name	Signal Description Type	Str President	s Langth (bits)	Scala Earthy (Ma	u Min	Way	1002	Crama Lanoth 9792	Outs IN Least	Daniel	fuencii i	Outs/20 O	Daniel Co	Outside O	matic Council	Own	Data OUT	OverOvetill	Owner	Outs/Out/III	Daniford Date	oute hander	SI DANGER	a freedom	RTR Frame	Satiscation Needed?	flura in	Response
No.	Nack	General Non-acknowledgement 2052000 motorCon	oler REV	8 00	1x80 2385	90304 Device	202.22	1,72	ai recio	. Cargo (Diti)					, and the same of	- DESTRUM	· Dago	Lungij .	Lungs 5	-		220		Lenga	Dancop	DEECCH)	Umacco <sub>2</sub>	January Lan	east) tareau	aj tamos(e)	- Laurougij	N N	lot implemented	Not implemented I	Not implemented
Yes	Ack	General Acknowledge (used by USB) 2052040 motorCon	oler REV	a 10	Dalif 2386	90368 Device	_	$\vdash$	_	_		_	_	-		_	$\vdash$			_	-	_	_	_	0	+		_		_	_	+		Not Used 2	Not Used
N/A	Broadcast (not a command)	Frame Description CAN let Desice Ty General Non-acknowledgement 200000 materical General Acknowledge (used by USB) 2000000 materical 2000000 materical 2000000 materical Acknowledge (used by USB) 2000000 materical Acknowledge (used by USB) 20000000 materical Acknowledge (used by USB) 2000000000000000000000000000000000000	ster REV	* *	3385	91328 Device Any RDV	+	$\vdash$	_	+		+	_	+		+	9			-	-	-	+	+	0	+		-+	-	+	+	+			
Yes - INTERNAL ONLY	Heartbeat	CONTROL 2002/40 BIOGROUP	oler REV	9 20	1082 2385	91456 Controller Any PSCV Motor 91520 Controller	+	$\vdash$	-	+	$\vdash$	+	+	+		+	8 Enabled(0)	Enabled(1)	Enabled(2) E	Enabled(3) G	Enabled[4] E	nabled(S) Cnable	d)Q Enables	(7)	+	+		-+	-+	+	+	+		Heartbeat command P	None
100	Sync	Synchronize all 6CV neutr controllers. 26524CD system Cont. Class as ACV rest controllers whos takes a ACV rest controllers who takes a ACV rest controllers who takes a ACV rest controller who takes a ACV rest controller or takes a ACV rest control	oler REV	9 30	200	91520 Controller			_	_			_			_	0						-	_	_	-		-			_	+		0 Styte Request 2	None
		IDs are set to 0 to all respond with a trashed version of their serial numbers (96-bit unique number hash to 48 bits)																														1 1			
		after a random number of ms. Arbitration tauto netry means all messages will get through on the bus.																														1 1			
		Componer now has a set of an inamed this on the bus and can address by this 48-bit id - collision is possible but				Any REV Motor 91584 Controller Any REV Motor 91648 Controller	L I																		1	L						1 1			
15.0	Dosey	Use 22-bit hashed unique ID to assign the CAN ID of the controller 2062540 motorCon	oter REV	1 1	230	Any REV Motor	Ulique 10																-	_	48000	su(1)	nopa)	DSI				+		0 Byte Request	D Healt
1.5.0	DAssign	the CAN ID of the controller 2052540 motorCon	oler REV	9 5	bd6 2385	91648 Controller	Can ld										s log	D(1)	03) 6	901 0	CANDO		_		_							$\perp$		0 Ryte Request 2	None
		The command and use of the sequent the current firmmens version for the nature commoder. The command uniquely addresses a device and only the sequent																														1 1			
		addresses a device and only the addressed device will respond to this message. The motor controller will send																														1 1			
	Process Marries	firmulate version of the motor controller and one byte indicating if this is a	-0.0			Individual 91840 Device	Firmware Version																		Firmuare 6 Version	Firmware Version	Firmware	Firmum	HW Rev (	ASCII Firmare I	Hash Firmware Has		his is a duplicate of the oardcast frame in REV ddress space		
1.6.0	Finteene verson	secuji or release suic. Josuppo Indistruori	ORF PLAY		230	91840 Device	is Debug					_	_							_		_	_		Enversion	Version	verson	verson is or	Char)	181	Pi -	- "	doness space	O seyte Haquest D	Homeste Hame
			$\pm$			_	is Debug Hardware Ravision Firmware Hash									_							$\pm$		_	+						$\pm$			
		This command causes the motor controller to send out a response to indicate that device is present on the																														1 1			
		CAN natuck. It order to prevent all devices from responding at once, the motor controllers will wait for jdevice																														1 1			
		number) = first after the enumerate command before responding. Once enumeration has been started, the CAN																														1 1			
		device that requested the enumeration sequence should wait at least 80ms before connection any other CAN traffic																														1 1			
		to avoid affecting the enumeration sequence. After the enumeration sequence is complete, normal CAN																														1 1			
		activity should resume allowing the motor controllers to keep their CAN links active. The motor controller will																														1 1			
		also send out an enumeration message with its ID when it is first started. This can be used by the CAN controller to																														1 1			
		This command is small of the command								1																									
No	REV Enumerate	because of an intermittent power taken. 2053940 motorCon Command from roboRiO which foolor.	oler REV		230	91904 Device	+	$\vdash$	_			_	_	$\vdash$		_	0	$\vdash$	$\vdash$		$\vdash$		-	_	0	+	<b>—</b>			_	+	+			
		Sections of an intermittent power  1003669 motorCon  Command from substitution shall have been a construction  that shall be sold to shall the device  from the school of the sold to shall the device  from the school (i), fusions the device  from the school (i), fusions the device  from the school (i), fusions the device  from the school (ii), fusions the device  from the school (ii), fusions as sold  from the school (iii), fusions as sold  from the school (iii), fusions the device  from the school (iii) for school (iii), for   1005660 motorCon  1								1										è	LockType (Default = 0 = Lock commands AND hearbeat) 1 = Lock out only hearbeat														
		from the roboRIO. (Latches the device into 'competition FW mode' or similar). Look troe is valid for what is allowed to				Individual															commands AND hearbear) 1 * Lock out														
130	soboRIO Look	be set out by the USR bus. 20529C0 motorCon	oler REV	9 11	2305	92032 Device	Lock API Lock Type	$\vdash$	$\pm$	+	=		$\perp$			$\pm$	a AP(0)	AP(t)	AP(Z) A			0						-	_		$\pm$	$\perp$			
100	Telemetry Update Mechanical Position Enod	te set of only by the USB bus. 2003800 enteroCont  Manually set the selementy data of the  set controller. 2003800 enteroCont  Manually set the selementy data of the  2003800 enteroCont  Manually set the selementy data of the  2003800 enteroCont	soler REV	10 0.0	DAG 2385	individual 92352 Device	Lock Type Lock Type Mechanical Position I Accumulator Analog Position	$\Box$									8 MechPos(0)	MechPos(1)	MechPos(2) M	MechPos(3)					1			$=$ $\mp$			1	$\Box$			
10.0	Telemetry Lipdate I Accum	controller 2052990 InctorCon Manually set the telemetry data of the	oler REV	10 20	NA2 2385	92490 Device Individual	LAccumulator		_	_		_	_	-		_			Houn(2) IF			-	-	_	+-	+		-		_	_	+			
140				10 3 0	DA4 236	individual 92908 Device	Analog Position		$\perp$							$\perp$	8 MechPos(0)	wectros(1)	MechPos(2) M	ww/79/08[3]				$\perp$	1	$\pm$				$\pm$		$\pm \pm$			
No	Non-roboRIO Broadcast (not a command)	Sez a command. The groups is for non- closability cases princed commands. 2015/2000 mister Com Command from other processor which to come and USE the winding command the COUNTIES of the command is our the command of the command is our examples a Placetern yill case took chem the base as the event of the division to commanding GRHOR MAKE. 2015/Ceb mister Com-	ster REV	11 01	140 336	individual 93376 Device											8 Enabled(3)	Enabled(1)	Enabled(2) E	Enabled(3) G	Enabled[4] E	nabled[6] Cnable	djilj Enables	17)	T					1					
		tooks out USB from sending command or heartbest frames. This is ignored if the GOLDA'S of the command is our																			LocaTions.														
		own USIR. This is useful for setting a device on the bus as the 'master'. For																		2	(Default = 0 = Lock											1 1			
		example a Raspberry Pi can look down the bus as the owner of the device to prevent other devices from	. L.			Individual															LockType (Default = 0 = Lock commands AND hearbeat) 1 = Lock out only hearbeat											1 1			
1.10	BOS-HRU LEOK	commanding so-look stacks. 2000C40 Biolistical	COR PAN	-11 16	200	93440 Device	Non-RIO API Non-RIO Lock Type										I MO	ANG)	A*(2) A	estal in	only neartoest	-	-	1		1						+			
		Neartheast command for all REV motor commoders. This is the same as the heartheast but Golden or activable the commoder if a book packet has been exclused. The commoder with the same accessed. The commoder what for an accessed. The commode what for an accessed the commode what for an accessed to the commoder with the same accessed to the commoder with the same accessed to the commoder with the same accessed to the same access																																	
		controller if a look packet has been recieved. This command waits for an additional one second after hoof to				Indiana																										1 1			
130	son-RIO Heartheat LISIS Only Identify	check for no look 2052/280 motorCon 2052/2C0 motorCon	oler REV	11 20	1x92 3395	individual 93504 Device Individual 93568 Device	Enable String	-	_	+		_	_	-	_	_	8 Enabled[0]	Enabled[1] 6	Enabled[2] E	Enabled(3) E	Enabled[4] G	nabled[6] Enable	djilj Enabled	07	+-	+		_		_	+	+			
15.0	USIR Only Identify	2052CC0 InstorCon		11 3	NS3 2389					_							9			_			_	_	- 0	_						-	his API is one with the		
1					- 1					- 1							1 1																		
120	Parameter Access	Set parameter using the CAN ID fields Instead of a selection in the packet 205C000 motorCon	oler REV	48 00	- 1												S Paramjöj	Param(1)	Param[2] P	Param(3)	Parameter Type				6 Paran(0)	Param(1)	Paran(2)	Paran(3) Para	Paramete Response smeter Type response	p - OK		4 6	arameter ID. Send a 0 data eigh message and/or send se remote bit to get the alue, send data to set it.		
120	Parameter Access	Set parameter using the CAN ID felds instead of a selection in the packet 2050000 motorCon	ssier REV	48 0	- 1				+							+	S Param(0)				Parameter Type				6 Parango	Param(1)	Paran(2)		Parameter Response smeter Type, response s	r s(0 = ORQ		-	his API is on't with the arameter ID. Send a 0 data logh message and/or sand se remote bit to get the alue, send data to set it.		
120	Parameter Access	Set parameter using the CAN ID failed estated of a selection in the pathod 20000000 motorCon devication of the candidate of t	soler RSV	48 01	- 1												S Paramjöj		Param(2) P.						6/Paran(0)	Param(1)	Paran(2)	Paran(3) Para	Parametei Response segonse s	r p p = okq		4 4	arameter ID. Send a 0 data night message and/or sand ne remote bit to get the alue, send data to sait it.		
120	Parameter Access	Set parameter using the CAN LD fallor intended of a selection in the packed 2050000 mateurCon devication of the packed 2050000 mateurCon devication of the packed 20500000 mateurCon devication of the packed 20500000000000000000000000000000000000	soler RSV	48 01	- 1																					Pacan(1)	Paran(2)		Parameter Sesponse smeter Type sesponse s	p - okg		4 .	arameter ID. Send a O data legib message and/or send he semote bit to get the akue, send data to set it.		
1.20	Parameter Access	See parameter using the CAN O feator. entered of a selection in the parameter. 20000000 motion Coronic desirability.	indier (REV	48 00	- 1																					Pacan(t)	Paran(2)		Parameter Desponse ameter Type: assponse i	is -		P	arameter ID. Send a O data logis message and/or send logis message and/or send le sende bit to get the akue, send data to set it.		
120	Parameter Access	See parameter using the CAN O feator. entered of a selection in the paramet. 2000,000 enter Can on the parameter of a selection in the selection in the parameter of a selection in the selection in t	noller PSDV	48 01	- 1																					Pasan(1)	Param(2)		Parameter Response execution Type execution 1	r (5 = (00)		P	arameter ID. Send a di data nggin mesangangan nggin mesangangan nggin mesangan nggin mengangan nggin mengan nggin mengan ng ng ng ng ng ng ng ng ng ng ng ng ng		
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120	Parameter Access	ther personner using the CANS Dates  Section 1 of the CANS Dates  Section 2 of the CANS Dates  Section 3 of the CANS Dates  Section 2 of the CANS Dates  Section 3 of the CANS Dates  Section	noler REV	48 01	- 1																					Paran(1)	Param(2)		Parometer Type assponse	r p = ON		9 4 6	arameter IV. Send a d data e sende data e de de de de e sende data to set z.		
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Version	Frame Name	Frame Description	CAN Id	Davice Type	Manufacturer /	PI Class API Indi	es API	Mask	Device ID	Signal Name	Signal Description	Туре	Bit Posit	ion Length	h (bibs) Scal	e Factor Off	het M	in .	Max	Unit	Frame Length RTR?	Data IN Length	eta(E) Dus	Ea(1) Data	(2) Date	a(2) Outa)	4) Out	najši (Daranje	Ostai	Data O Length	Oata	Out(0) Osta	eOur(1) Ose	wOut[2] Date	Out(3) Date(	Dun(4) Du	saCur(S) Dus	Out(4) Date	Out[7] Les	R Frame ngth Clarification Needed?	Data in	Resp	onse
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