

```

}else{
    reg_crc=reg_crc >>1;
}
}
}
return reg_crc;
}

```

3.5 Address list

The contents of available addresses are shown as below:

Content	Address	Function	
AC drive Parameters	GGnnH	GG means parameter group, nn means parameter number, for example, the address of Pr 04.01 is 0401H. Refer to chapter 5 for the function of each parameter. When reading parameter by command code 03H, only one parameter can be read at one time.	
Command Write only	2000H	Bit 0-1	00B: No function 01B: Stop 10B: Run 11B: Jog + Run
		Bit 2-3	Reserved
		Bit 4-5	00B: No function 01B: FWD 10B: REV 11B: Change direction
		Bit 6-7	00B: Comm. forced 1st accel/decel 01B: Comm. forced 2nd accel/decel
		Bit 8-15	Reserved
	2001H	Frequency command	
	2002H	Bit 0	1: EF (external fault) on
		Bit 1	1: Reset
		Bit 2-15	Reserved
	Status monitor Read only	2100H	Error code:
0: No error occurred			
1: Over-current (oc)			

Content	Address	Function
	2100H	2: Over-voltage (ov)
		3: IGBT Overheat (oH1)
		4: Power Board Overheat (oH2)
		5: Overload (oL)
		6: Overload1 (oL1)
		7: Overload2 (oL2)
		8: External fault (EF)
		9: Current exceeds 2 times rated current during accel (ocA)
		10: Current exceeds 2 times rated current during decel (ocd) Current exceeds 2 times rated current during decel (ocd)
		11: Current exceeds 2 times rated current during steady state operation (ocn)
		12: Ground Fault (GFF)
		13: Low voltage (Lv)
		14: PHL (Phase-Loss)
		15: Base Block
		16: Auto accel/decel failure (cFA)
		17: Software protection enabled (codE)
		18: Power Board CPU WRITE failure (CF1.0)
		19: Power Board CPU READ failure (CF2.0)
		20: CC, OC Hardware protection failure (HPF1)
		21: OV Hardware protection failure (HPF2)
		22: GFF Hardware protection failure (HPF3)
		23: OC Hardware protection failure (HPF4)
		24: U-phase error (cF3.0)
		25: V-phase error (cF3.1)
		26: W-phase error (cF3.2)
		27: DCBUS error (cF3.3)
		28: IGBT Overheat (cF3.4)
		29: Power Board Overheat (cF3.5)
		30: Control Board CPU WRITE failure (cF1.1)

Content	Address	Function	
		31: Control Board CPU WRITE failure (cF2.1)	
		32: ACI signal error (AErr)	
		33: Reserved	
		34: Motor PTC overheat protection (PtC1)	
		35~39: Reserved	
		40: Communication time-out error of control board and power board (CP10)	
		41: dEb error	
		42: ACL (Abnormal Communication Loop)	
		Status of AC drive	
	2101H	Bit 0-1	00B: RUN LED is off, STOP LED is on (The AC motor Drive stops)
			01B: RUN LED blinks, STOP LED is on (When AC motor drive decelerates to stop)
			10B: RUN LED is on, STOP LED blinks (When AC motor drive is standby)
			11B: RUN LED is on, STOP LED is off (When AC motor drive runs)
		Bit 2	1: JOG command
		Bit 3-4	00B: FWD LED is on, REV LED is off (When AC motor drive runs forward)
			01B: FWD LED is on, REV LED blinks (When AC motor drive runs from reverse to forward)
			10B: FWD LED blinks, REV LED is on (When AC motor drive runs from forward to reverse)
			11B: FWD LED is off, REV LED is on (When AC motor drive runs reverse)
		Bit 5-7	Reserved
		Bit 8	1: Master frequency Controlled by communication interface
		Bit 9	1: Master frequency controlled by analog signal
		Bit 10	1: Operation command controlled by communication interface
	Bit 11-15	Reserved	
	2102H	Frequency command (F)	

Content	Address	Function
	2103H	Output frequency (H)
	2104H	Output current (AXXX.X)
	2105H	Reserved
	2106H	Reserved
	2107H	Reserved
	2108H	DC-BUS Voltage (UXXX.X)
	2109H	Output voltage (EXXX.X)
	210AH	Display temperature of IGBT (°C)
	2116H	User defined (Low word)
	2117H	User defined (High word)

Note: 2116H is number display of Pr.00.04. High byte of 2117H is number of decimal places of 2116H. Low byte of 2117H is ASCII code of alphabet display of Pr.00.04.

3.6 Exception response:

The AC motor drive is expected to return a normal response after receiving command messages from the master device. The following depicts the conditions when no normal response is replied to the master device.

The AC motor drive does not receive the messages due to a communication error; thus, the AC motor drive has no response. The master device will eventually process a timeout condition.

The AC motor drive receives the messages without a communication error, but cannot handle them. An exception response will be returned to the master device and an error message “CExx” will be displayed on the keypad of AC motor drive. The xx of “CExx” is a decimal code equal to the exception code that is described below.

In the exception response, the most significant bit of the original command code is set to 1, and an exception code which explains the condition that caused the exception is returned.

Example of an exception response of command code 06H and exception code 02H:

ASCII mode:

STX	‘.’
Address Low	‘0’
Address High	‘1’
Function Low	‘8’

RTU mode:

Address	01H
Function	86H
Exception code	02H
CRC CHK Low	C3H