

Таблица 5 – Формат байтов команд для программирования

Instruction	Instruction Format				Operation
	Byte 1	Byte 2	Byte 3	Byte 4	
Programming Enable	1010 1100	0101 0011	xxxx xxxx	xxxx xxxx	Enable Serial Programming after RESET goes low.
Chip Erase	1010 1100	100x xxxx	xxxx xxxx	xxxx xxxx	Chip Erase EEPROM and Flash.
Read Program memory	0010 H000	0000 aaaa	bbbb bbbb	oooo oooo	Read H (high or low) data o from Program memory at word address a:b.
Load Program memory Page	0100 H000	0000 xxxx	xxxxb bbbb	iiii iiii	Write H (high or low) data i to Program memory page at word address b. Data low byte must be loaded before Data high byte is applied within the same address.
Write Program memory Page	0100 1100	0000 aaaa	bbbx xxxx	xxxx xxxx	Write Program memory Page at address a:b.
Read EEPROM Memory	1010 0000	00xx xxxx	bbbb bbbb	oooo oooo	Read data o from EEPROM memory at address a:b.
Write EEPROM Memory	1100 0000	00xx xxxx	bbbb bbbb	iiii iiii	Write data i to EEPROM memory at address a:b.
Read Lock bits	0101 1000	0000 0000	xxxx xxxx	xxxx oooo	Read Lock bits. "0" = programmed, "1" = unprogrammed. See Table 81 on page 179 for details.
Write Lock bits	1010 1100	111x xxxx	xxxx xxxx	111i iiii	Write Lock bits. Set bits = "0" to program Lock bits. See Table 81 on page 179 for details.
Read Signature Byte	0011 0000	00xx xxxx	xxxx xxb	oooo oooo	Read Signature Byte o at address b.
Write Fuse bits	1010 1100	1010 0000	xxxx xxxx	iiii iiii	Set bits = "0" to program, "1" to unprogram. See Table 84 on page 181 for details.
Write Fuse High Bits	1010 1100	1010 1000	xxxx xxxx	iiii iiii	Set bits = "0" to program, "1" to unprogram. See Table 83 on page 180 for details.
Read Fuse bits	0101 0000	0000 0000	xxxx xxxx	oooo oooo	Read Fuse bits. "0" = programmed, "1" = unprogrammed. See Table 84 on page 181 for details.
Read Fuse High Bits	0101 1000	0000 1000	xxxx xxxx	oooo oooo	Read Fuse high bits. "0" = programmed, "1" = unprogrammed. See Table 83 on page 180 for details.
Read Calibration Byte	0011 1000	00xx xxxx	0000 00bb	oooo oooo	Read Calibration Byte

Примечание:

- a - адрес старших разрядов;
- b - адрес младших разрядов;
- H - 0 - мл. байт, 1 - ст. байт;
- o - вывод данных;
- i - ввод данных;
- x - произвольное значение.

2.4.3 Опрос данных Flash памяти

Когда страница программируется во Flash, при чтении по адресам в пределах данной страницы возвращается \$FF. Микроконтроллер готов к