

Register Name	Bits	Location	Description
OCR (VDD voltage profile of card)	32	31	Card power up status bit (busy)
		30-24	Reserved
		23	3.5-3.6
		22	3.4-3.5
		21	3.3-3.4
		20	3.2-3.3
		19	3.1-3.2
		18	3.0-3.1
		17	2.9-3.0
		16	2.8-2.9
		15	2.7-2.8
		14	2.6-2.7
		13	2.5-2.6
		12	2.4-2.5
		11	2.3-2.4
		10	2.2-2.3
		9	2.1-2.2
		8	2.0-2.1
		7-0	Reserved
CID	128	127-120	Manufacturer ID: 8 bit binary number
		119-104	OEM/Application ID: 2 ASCII
		103-64	Product Name: 5 ASCII
		63-56	Product Revision: 2 binary coded decimal digits
		56-24	Product Serial Number: 32 bit binary
		23-20	Reserved
		19-8	Manufacturing date: 2 hex digits YM, Y = 0 = 2000,
		7-1	CRC7 Checksum: 7 bits checksum of CID
		0	Always 1
		127-126	(R) CSD_STRUCTURE: CSD structure
		125-120	Reserved
		119-112	(R) TAAC: data read access-time-1
		111-104	(R) NSAC: data read access-time-2 in CLK cycles (NSAC*100)
		103-96	(R) TRAN_SPEED: max data transfer rate
		95-84	(R) CCC: card command classes
		83-80	(R) READ_BLK_LEN: max read data block length
		79	(R) READ_BLK_PARTIAL: partial blocks for read allowed
		78	(R) WRITE_BLK_MISALIGN: write block misalignment
		77	(R) READ_BLK_MISALIGN: read block misalignment
		76	(R) DSR_IMP: DSR implemented
		75-74	Reserved
		73-62	(R) C_SIZE: device size
		61-59	(R) VDD_R_CURR_MIN: max read current @ VDD min

CSD	128	58-56	(R) VDD_R_CURR_MAX: max read current @ VDD max
		55-53	(R) VDD_W_CURR_MIN: max write current @ VDD min
		52-50	(R) VDD_W_CURR_MAX: max write current @ VDD max
		49-47	(R) C_SIZE_MULT: device size multiplier
		46	(R) ERASE_BLK_EN: erase single block enable
		45-39	(R) SECTOR_SIZE: erase sector size
		38-32	(R) WP_GRP_SIZE: write protect group size
		31	(R) WP_GRP_ENABLE: write protect group enable
		30-29	Reserved for MultiMediaCard compatibility
		28-26	(R) R2W_FACTOR: write speed factor
		25-22	(R) WRITE_BL_LEN: max write data block length
		21	(R) WRITE_BL_PARTIAL: partial blocks for write allowed
		20-16	Reserved
		15	(R/W(1)) FILE_FORMAT_GRP: file format group
		14	(R/W(1)) COPY: copy flag (OTP)
		13	(R/W(1)) PERM_WRITE_PROTECT: permanent write protection
		12	(R/W) TMP_WRITE_PROTECT: temporary write protection
		11-10	(R/W(1)) FILE_FORMAT: file format
		9-8	Reserved
		7-1	(R/W) CRC: Checksum for CSD contents.
		0	Always 1
RCA	16	16-0	Card address result from card identification
DSR	16	16-0	(OPTIONAL) Stage register to improve bus performance. CSD contains information, default 0x404
SCR	64	63-60	(R) SCR_STRUCTURE: Version number of SCR structure
		59-56	(R) SD_SPEC: SD version supported by card
		55	(R) DATA_STAT_AFTER_ERASE: status after erase
		54-52	(R) SD_SECURITY: Security algorithm supported by card
		51-48	SD_BUS_WIDTHS: All DAT bus widths supported by card
		47-32	Reserved
		31-0	Reserved for Manufacture