

This is the final list of new Registers that the AVR does not have.

| Addr | Name | Bit7 | Bit6 | Bit5 | Bit4 | Bit3 | Bit2 | Bit1 | Bit0 |
|------|--------|---|--------|--------|--------|--------|--------|--------|--------|
| 0xF6 | GUID3 | GUID Byte 3 | | | | | | | |
| 0xF5 | GUID2 | GUID Byte 2 | | | | | | | |
| 0xF4 | GUID1 | GUID Byte 1 | | | | | | | |
| 0xF3 | GUID0 | GUID Byte 0 | | | | | | | |
| 0xF2 | PMCR | PMCE | CLKFS | CLKSS | WCLKS | OSCKEN | OSCMEN | RCKEN | RCMEN |
| 0xF0 | PMX2 | WCE | STOSC1 | STOSC0 | - | - | XIEN | E6EN | C6EN |
| 0xEE | PMX0 | PMXCE | C1BF4 | C1AF5 | C0BF3 | C0AC0 | SSB1 | TXD6 | RXD5 |
| 0xED | PMX1 | - | - | - | - | - | C3AC | C2BF7 | C2AF6 |
| 0xEC | TCKCSR | - | F2XEN | TC2XF1 | TC2XF0 | - | AFCKS | TC2XS1 | TC2XS0 |
| 0xE2 | PSSR | PSS1 | PSS3 | - | - | - | - | PSR3 | PSR1 |
| 0xE1 | OCPU | PUE7 | PUE6 | PUE5 | PUE4 | PUE3 | PUE2 | PUE1 | PUE0 |
| 0xE0 | IHDR | - | - | IHDR5 | IHDR4 | IHDR3 | IHDR2 | IHDR1 | IHDR0 |
| 0xDE | DAPTE | DAPTE | - | - | - | - | - | - | - |
| 0xDD | DAPTR | DAPTR | - | - | - | - | - | - | - |
| 0xDC | DAPCR | DAPEN | GA1 | GA0 | DNS2 | DNS1 | DNS0 | DPS1 | DPS0 |
| 0xCF | LDOCR | WCE | - | - | - | PDEN | VSEL2 | VSEL1 | VSEL0 |
| 0xCE | VCAL2 | Calibration value for 2.048V internal reference | | | | | | | |
| 0xCD | VCAL1 | Calibration value for 1.024V internal reference | | | | | | | |
| 0xCC | VCAL3 | Calibration value for 4.096V internal reference | | | | | | | |
| 0xC8 | VCAL | Internal Voltage Reference calibration register | | | | | | | |
| 0xAF | DPS2R | - | - | - | - | DPS2E | LPRCE | TOS1 | TOS0 |
| 0xAE | IOCWK | IOC7 | IOC6 | IOC5 | IOC4 | IOC3 | IOC2 | IOC1 | IOC0 |
| 0xAD | ADCSR | BGEN | REFS2 | IVSEL1 | IVSEL0 | - | VDS2 | VDS1 | VDS0 |
| 0xAC | ADMSC | AMOF | - | - | - | AMFC3 | AMFC2 | AMFC1 | AMFC0 |
| 0xAB | ADT1H | ADC Auto-monitor Overflow threshold high byte | | | | | | | |
| 0xAA | ADT1L | ADC Auto-monitor Overflow threshold low byte | | | | | | | |
| 0xA9 | PORTE | Port Output E (for compatible with LGT8FX8D) | | | | | | | |
| 0xA8 | DDRE | Data Direction E (for compatible with LGT8FX8D) | | | | | | | |
| 0xA7 | PINE | Port Input E (for compatible with LGT8FX8D) | | | | | | | |
| 0xA6 | ADT0H | ADC Auto-monitor Underflow threshold high byte | | | | | | | |
| 0xA5 | ADT0L | ADC Auto-monitor Underflow threshold low byte | | | | | | | |
| 0xA4 | OFR1 | ADC positive offset trimming | | | | | | | |
| 0xA3 | OFR0 | ADC negative offset trimming | | | | | | | |
| 0xA1 | DALR | DAC data register | | | | | | | |
| 0xA0 | DACON | - | - | - | - | DACEN | DAOE | DAVS1 | DAVS0 |
| 0x9F | OCR3CH | Compare output register high byte of Timer3 C channel | | | | | | | |
| 0x9E | OCR3CL | Compare output register low byte of Timer3 C channel | | | | | | | |
| 0x9D | DTR3H | Dead-band register high byte of Timer3 | | | | | | | |
| 0x9C | DTR3L | Dead-band register low byte of Timer3 | | | | | | | |
| 0x9B | OCR3BH | Compare output register high byte of Timer3 B channel | | | | | | | |
| 0x9A | OCR3BL | Compare output register low byte of Timer3 B channel | | | | | | | |
| 0x99 | OCR3AH | Compare output register high byte of Timer3 A channel | | | | | | | |
| 0x98 | OCR3AL | Compare output register low byte of Timer3 A channel | | | | | | | |
| 0x97 | ICR3H | Input capture register high byte of Timer3 | | | | | | | |
| 0x96 | ICR3L | Input capture register low byte of Timer3 | | | | | | | |
| 0x95 | TCNT3H | Counter register high byte of Timer3 | | | | | | | |
| 0x94 | TCNT3L | Counter register low byte of Timer3 | | | | | | | |
| 0x93 | TCCR3D | Control register D of Timer3 | | | | | | | |
| 0x92 | TCCR3C | Control register C of Timer3 | | | | | | | |
| 0x91 | TCCR3B | Control register B of Timer3 | | | | | | | |
| 0x90 | TCCR3A | Control register A of Timer3 | | | | | | | |
| 0x8D | DTR1H | Dead-band register high byte of Timer1 | | | | | | | |
| 0x8C | DTR1L | Dead-band register low byte of Timer1 | | | | | | | |
| 0x83 | TCCR1D | DSX17 | DSX16 | DSX15 | DAX14 | - | - | DSX11 | DSX10 |
| 0x7D | ADCSRC | OFEN | - | SPN | AMEN | - | SPD | DIFS | ADTM |
| 0x76 | DIDR2 | - | PB5D | - | - | - | - | - | - |
| 0x75 | IVBASE | Interrupt Vector Base Address | | | | | | | |
| 0x74 | PCMSK4 | | | | | | | | |
| 0x73 | PCMSK3 | PCINT[39:32] | | | | | | | |
| 0x71 | TIMSK3 | - | - | ICIE3 | - | OCIE3C | OCIE3B | OCIE3A | TOIE3 |
| 0x67 | RCKCAL | RC32K Calibration | | | | | | | |
| 0x65 | PRR1 | - | - | PRWDT | - | PRTIM3 | PREFL | PRPCI | - |
| 0x62 | VDTCR | WCE | SWR | - | - | VDTS | - | VDREN | VDTEN |
| 0x5C | E2PD3 | E2PCTL Data register byte 3 | | | | | | | |
| 0x5B | C1TR | AC1 trimming data | | | | | | | |
| 0x5A | E2PD1 | E2PCTL Data register byte1 | | | | | | | |
| 0x59 | DSAH | DSA[31:16] access port of uDSC | | | | | | | |
| 0x58 | DSAL | DSA[15:0] access port of uDSC | | | | | | | |
| 0x56 | ECCR | WEN | EEN | ERN | SWM | CP1 | CP0 | ECS1 | ECS0 |
| 0x52 | C0TR | AC0 Trimming register | | | | | | | |
| 0x51 | C0XR | - | COOE | COHYSE | COP50 | COWKE | C0FEN | C0FS1 | C0FS0 |
| 0x4F | DTR0 | TC0 Dead-band timing control register | | | | | | | |
| 0x49 | TCCR0C | DSX07 | DSX06 | DSX05 | DSX04 | - | - | DSX01 | DSX00 |
| 0x3A | C1XR | - | C1OE | C1HYSE | C1PS0 | C1WKE | C1FEN | C1FS1 | C1FS0 |
| 0x39 | SPFR | RDFULL | RDEMPT | RDPT1 | RDPT0 | WRFULL | WREMPT | WRPT1 | WRPT0 |
| 0x38 | TIFR3 | - | - | ICF3 | - | - | OCF3B | OCF3A | TOV3 |
| 0x34 | PORTF | Port Output of Group F | | | | | | | |
| 0x33 | DDRF | Data Direction of Group F | | | | | | | |
| 0x32 | PINF | Port Input of Group F | | | | | | | |
| 0x31 | DSDY | DSDY access port of uDSC | | | | | | | |
| 0x30 | DSDX | DSDX access port of uDSC | | | | | | | |
| 0x2F | C1SR | C1D | C1BG | C1O | C1I | C1IE | C1IC | - | C1IS |
| 0x2E | PORTE | Port Output of Group E | | | | | | | |
| 0x2D | DDRE | Data Direction of Group E | | | | | | | |
| 0x2C | PINE | Port Input of Group E | | | | | | | |
| 0x22 | DSSD | DSSD access port of uDSC | | | | | | | |
| 0x21 | DSIR | Instruction register of uDSC | | | | | | | |
| 0x20 | DSCR | DSUEN | MM | D1 | D0 | - | DSN | DSZ | DSC |

8-bit LGT8XM

RISC Microcontroller with
In-System Programmable
FLASH Memory

LGT8F88P

LGT8F168P

LGT8F328P

Data book

Version 1.0.4 J

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