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;
; e-paper-controller functions:  SSD1681 IL3829 SD1675
;                               200*200 200*300 160*296
;*****

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.equ   DRVOUTCTRL      = 0x01   ; x x x DRIVER_OUTPUT_CONTROL
.equ   GateDRVCTRL     = 0x03   ; x x x Gate Driving voltage ctrl
.equ   SourceDRVCTRL   = 0x04   ; x x x Source Driving voltage ctrl
.equ   DisplayControl  = 0x07   ; - x - Display Control
.equ   InitCodeSet     = 0x08   ; x - - Initial Code Setting OTP Program
.equ   InitCodeReg     = 0x09   ; x - - Write Register for Initial Code Set
.equ   OvrloopPeriod   = 0x0B   ; - x - Gate and Source non overlap period ctrl
.equ   BOOST_SFTSTRT  = 0x0C   ; x x x BOOSTER_SOFT_START_CONTROL
.equ   GATSCN_STRTPOS = 0x0F   ; - x x GATE_SCAN_START_POSITION
.equ   DEEP_SLEEP      = 0x10   ; x x x DEEP_SLEEP_MODE
.equ   DAT_ENTRY_MOD   = 0x11   ; x x x DATA_ENTRY_MODE_SETTING
.equ   SW_RESET        = 0x12   ; x x x SW_RESET
.equ   HV_ReadyDetect  = 0x14   ; x - x HV Ready Detect
.equ   VCI_Detect      = 0x15   ; x - x VCI Detect
.equ   Temp_Sens_Sel   = 0x18   ; x - - Temperature Sensor Select
.equ   TEMPESENS_CTRL = 0x1A   ; x x x TEMPERATURE_SENSOR_CONTROL
.equ   Temp_Sens_ext   = 0x1C   ; x x x ext Temperature Sensor write
.equ   Temp_Sens_ctl   = 0x1D   ; - x - Ld temp reg with temp sens read
.equ   MASTER_ACTV    = 0x20   ; x x x MASTER_ACTIVATION
.equ   DISP_UPD_CTRL1 = 0x21   ; x x x DISPLAY_UPDATE_CONTROL_1
.equ   DISP_UPD_CTRL2 = 0x22   ; x x x DISPLAY_UPDATE_CONTROL_2
.equ   WRITE_RAM       = 0x24   ; x x x WRITE_RAM
.equ   WRITE_RAM red   = 0x26   ; x x x WRITE_RAM red
.equ   VCOM_Sense      = 0x28   ; x x x VCOM Sense
.equ   VCOM_SnsDuration = 0x29 ; x x x VCOM Sense Duration
.equ   ProgramVCOMOTP  = 0x2A   ; x x x Program VCOM OTP
.equ   WRITE_VCOMCtl   = 0x2B   ; x - - WRITE_VCOM_Control REGISTER
.equ   WRITE_VCOMREG   = 0x2C   ; x x x WRITE_VCOM_REGISTER
.equ   Program WS OTP  = 0x30   ; x x x Program Waveform Setting OTP
.equ   Load WS OTP    = 0x31   ; x - x Load Waveform Setting OTP
.equ   WRITE_LUT_REG   = 0x32   ; x x x WRITE_LUT_REGISTER
.equ   CRC calculation = 0x34   ; x - - CRC calculation
.equ   ProgramOTPsel  = 0x36   ; x x x Program OTP selection
.equ   wrtDisplayOption = 0x37 ; x x x Write Register for DisplOpt-OTP selectCtrl
.equ   writeUserID     = 0x38   ; x - - Write Register for User ID
.equ   OTP_programMode = 0x39   ; x - - OTP program mode
.equ   DUMMLIN_PERIOD = 0x3A   ; - x x SET_DUMMY_LINE_PERIOD
.equ   SET_GATE_TIME   = 0x3B   ; - x x SET_GATE_TIME line width
.equ   BORDER_WAVFRM  = 0x3C   ; x x x BORDER_WAVEFORM_CONTROL
.equ   End_Option      = 0x3F   ; x - - Option for LUT end
.equ   ReadRamOption   = 0x41   ; x - x Read RAM Option
.equ   SetRamXStrtEnd  = 0x44   ; x x x Set RAM X Start/End pos
.equ   RAM_Y_STRT_END  = 0x45   ; x x x SET_Ram_Y_ADR_STRT_END_POS
.equ   AutoWriteRedRam = 0x46   ; x - x Auto Write Red Ram
.equ   AutoWriteBWRam  = 0x47   ; x - x Auto Write B/W Ram
.equ   RAM_X_AD_COUN   = 0x4E   ; x x x SET_RAM_X_ADDRESS_COUNTER
.equ   RAM_Y_AD_COUN   = 0x4F   ; x x x SET_RAM_Y_ADDRESS_COUNTER
.equ   SetAnalogBlk    = 0x74   ; - - x Set analog Block ctrl
.equ   SetDigitalBlk   = 0x7E   ; - - x Set digital Block ctrl
.equ   Nop              = 0x7F   ; x x x No operation
.equ   TRM_FRAM_RDWR   = 0xFF   ; - x - TERMINATE_FRAME_READ_WRITE
; Lesebefehle, nur per bit-banging erreichbar
.equ   READ_1          = 0x0A   ; x - - Read Reg. Initial Code Setting see Appnote
.equ   READ_2          = 0x1B   ; x x x Read from temperature register
.equ   READ_3          = 0x25   ; - x - Read RAM
.equ   READ_4          = 0x27   ; x - x Read RAM
.equ   READ_5          = 0x2D   ; x x x Read OTP Register for Display Option
.equ   READ_6          = 0x2E   ; x - - Read OTP 10 Byte User ID
.equ   READ_7          = 0x2F   ; x - x Status Bit Read (HV Rdy, VCI low, Busy flg, ID)
.equ   READ_8          = 0x33   ; - x - Read LUT register
.equ   READ_9          = 0x35   ; x - - CRC Status Read

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