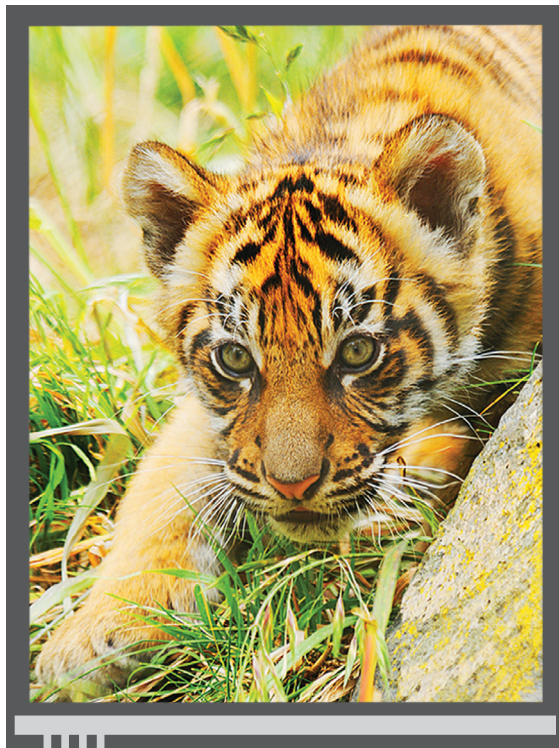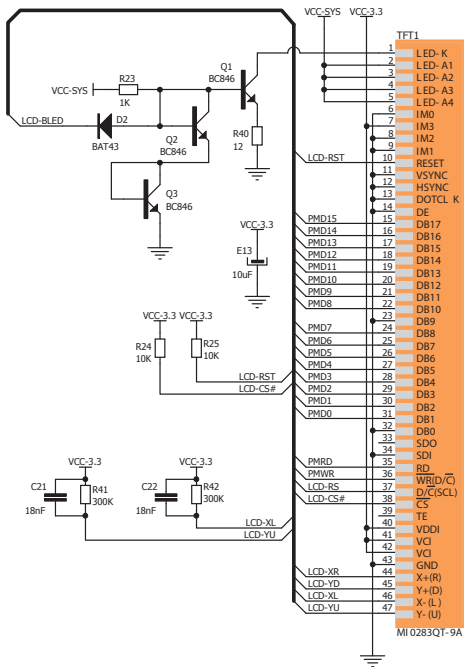# mikromedia™
## for PIC32®

We present you with a complete color schematics for mikromedia™ for PIC32® development board. We want you to know what your board is consisted of and how it actually works.

**MikroElektronika**
DEVELOPMENT TOOLS | COMPILERS | BOOKS

Vcap  E9  10uF

VCC-3.3

U1

**PIC32MX460F512L**

MP3-CS#  1  RG15
PMD5  2  VDD
PMD6  4  RE5
PMD7  5  RE6
LCD-RST  6  RE7
FLASH-CS#  7  RC1
STAT  8  RC2
9  RC3
SCK2-RG6  R5  27  10  RC4
MISO2-RG7  11  RG6/SCK2
MOSI2-RG8  R4  27  12  RG7/SDI2
RST  R7  100  13  RG8/SDO2
SD-CS#  14  MCLR
15  RG9
16  VSS
RA0  17  VDD
RE8  18  RA0/TMS
RE9  19  RE8/INT1
RB5  20  RE9/INT2
RB4  21  RB5
RB3  22  RB4
RB2  23  RB3
RB1  24  RB2
RB0  25  RB1
26  RB0

VSS  75
RC14  74
RC13  73
RD0  72
RD11  71
RD10  70
RD9  69
RD8  68
RA15  67
RA14  66
VSS  65
OSC2  64
OSC1  63
VDD  62
RA5  61
RA4  60
SDA2/RA3  59
SCL2/RA2  58
USBDP  57
USBDM  56
D+/RG2  55
D-/RG3  54
VUSB  53
VBUS  52
U1TX/RF8  51
U1RX/RF2
USB-ID-RF3  RF3

SOSCO  X3  32.768kHz
SOSC1
RD0
RD11
RD10
MP3-RST#
MP3-DREQ
RA15
RA14
C30  22pF    C31  22pF
CLKO  X1  8MHz
CLKI
RA5  C1  22pF   C2  22pF
RA4
SDA2-RA3
SCL2-RA2
USB-DET
TX-RF8
RX-RF2
USB-ID-RF3

VREF-1.8  VCC-1.8  FP3  FERRITE  E11  10uF
RA10-VREF-1.8  J2  SMD JUMPER
RF3  J3
USB-ID-RF3
USB-ID  SMD JUMPER

VCC-3.3  E8  10uF  C5  100nF  C6  100nF  C7  100nF  C8  100nF  C25  100nF

RST  T2  BUTTON  T1  BUTTON  C3  100nF  R8  10K  VCC-3.3

VCC-SYS

HDR1  M1X26
RB0 1 27
RB1 2 28  RST
RB2 3 29  L
RB3 4 30  R
RB4 5 31  RD0
RB5 6 32  RD1
RE8 7 33  RD2
RE9 8 34  RA0
9 35  RA1
RA15 10 36  RA4
RA10 11 37  RA5
RC4 12 38  RA6
RB6 13 39  RA7
RB7 14 40  RD11
RF3 15 41  RD14
RG12 16 42  RD15
RG13 17 43  RF5
RF3 18 44  RX-RF2
19 45  TX-RF8
20 46  SCL2-RA2
SCK2-RG6 21 47  SDA2-RA3
MISO2-RG7 22 48
MOSI2-RG8 23 49
VCC-3.3 24 50
25 51
26 52
VCC-3.3  M1X26  HDR2

AN  PWM  INT  SCK  SDI  SDO  RX  TX  SCL  SDA

VCC-3.3  CN5  ICD2/3  M1X6
MCLR#  6
PGD2  5
PGC2  4
RB7  R3  100  3
RB6  R15  100  2
1

VCC-3.3  CN6  mikroProg  M1X5
PGC2  1
PGD2  2
MCLR#  3
4
5

VCC-1.8  R19  10K
MP3-CS#  R2  10K
MP3-RST#

MP3-BSYNC

C19  22pF  X2  12.288MHz  R1  1M  C20  22pF
MP3-CS#

U2  **VS1053**

XDCS/BSYNC 13
IOVDD1 14
VCO 15
DGND1 16
XTALO 17
XTALI 18
IOVDD2 19
DGND2 20
DGND3 21
DGND4 22
XCS 23
CVDD5 24

GPIO7 GPIO6 GPIO3 GPIO2 DREQ CVDD1 CVDD2 DGND0 XRESET MCP/LN1

LN2 48
AGND3 47
LEFT 46
AVDD2 45
RCAP 44
AVDD1 43
GBUF 42
AGND2 41
AGND1 40
RIGHT 39
GPIO0 38
GPIO4 37

RX TX SCLK SI SO CVDD3 XTEST GPIO0 GPIO1 GPIO4

R20 10K  VCC-3.3  R21 10K  R22 27

R33 470  E2 10uF  R  R18 100K  C18 3.3nF
R32 470  E1 10uF  L  R17 100K  C17 3.3nF

LEFT  R28 10  CN2
RIGHT  R29 10  PHONEJACK
GBUF

R30 20  R31 20  R27 10
VCC-1.8  C15 10nF  C16 10nF  C14 47nF
VCC-1.8  C4 100nF  C9 100nF  C10 100nF  C11 100nF

VCC-3.3  R13 10K  R12 10K
U9  ADXL345
VCC SCL SDA
GND ADD
Res Res
GND NC
GND INT2
VCC INT1
CS
SCL2-RA2  SDA2-RA3  ACC ADDRESS
J1  SMD JUMPER  VCC-3.3

VCC-3.3  C33 100nF  C32 100nF

VCC-3.3  C12 100nF  C23 100nF  C24 100nF  C26 100nF  C27 100nF

VCC-BAT
R6 4K7
R49 4K7
VSENSE
R34 4K7

CN1  BATT CONN  VCC-BAT

M1  DMP2160UW  D1  PMEG3010ER  VCC-USB  R43 10K
VCC-BAT  VCC-SYS

VCC-3.3  R39 4K7  LD2 CHARGE  VCC-3.3 R36 10K  VCC-3.3 R35 10K
STAT
Q4 BC846  Q5 BC846  R37 10K  R38 10K  E5 10uF
VCC-USB

U5  MCP73832
STAT PROG
VSS VDD
VBAT
R45 1K  E7 10uF  VCC-BAT  C40 2.2uF  VCC-SYS
R44 3K9
Charging Current approx. 250mA

C29 2.2uF  VCC-3.3  E10 10uF  VCC-1.8
U3  MIC5205-ADJ
Vin Vout
GND
EN ADJ
R47 220K  R46 100K  R50 0R

VCC-SYS  VCC-3.3  R26 2K2  REG1  LD29080DT33
Vin GND
Vout
LD1 POWER  E3 10uF  E4 10uF

VCC-3.3  R48 10K  VCC-3.3  C37 100nF
FLASH-CS#  U10  M25P80
MISO2-RG7  CS VCC
SDO HOLD
WP SCK
GND SDI
SCK2-RG6  MOSI2-RG8
VCC-MMC  FP1 FERRITE  E6 10uF  C38 100nF

VCC-MMC  R9 10K  R10 10K  R11 10K  CN4
SD-CS#  CS
MOSI2-RG8  Din
+3.3V
SCK2-RG6  SCK
MISO2-RG7  GND
SD-CD#  R16 27  Dout
CD

VCC-USB  CN3  USB MINIB
GND 5
USB-ID  ID 4
USBDP  D+ 3
USBDM  D- 2
USB-DET  VBUS 1
R14 100  FP2 FERRITE  C28 10nF

VCC-SYS  VCC-3.3

TFT1

| | | |
|---|---|---|
| 1 | LED- K | |
| 2 | LED-A1 | |
| 3 | LED-A2 | |
| 4 | LED-A3 | |
| 5 | LED-A4 | |
| 6 | IM0 | |
| 7 | IM3 | |
| 8 | IM2 | |
| 9 | IM1 | |
| 10 | RESET | |
| 11 | VSYNC | |
| 12 | HSYNC | |
| 13 | DOTCL K | |
| 14 | DE | |
| 15 | DB17 | |
| 16 | DB16 | |
| 17 | DB15 | |
| 18 | DB14 | |
| 19 | DB13 | |
| 20 | DB12 | |
| 21 | DB11 | |
| 22 | DB10 | |
| 23 | DB9 | |
| 24 | DB8 | |
| 25 | DB7 | |
| 26 | DB6 | |
| 27 | DB5 | |
| 28 | DB4 | |
| 29 | DB3 | |
| 30 | DB2 | |
| 31 | DB1 | |
| 32 | DB0 | |
| 33 | SDO | |
| 34 | SDI | |
| 35 | RD | |
| 36 | WR(D/C) | |
| 37 | D/C(SCL) | |
| 38 | CS | |
| 39 | TE | |
| 40 | VDDI | |
| 41 | VCI | |
| 42 | VCI | |
| 43 | GND | |
| 44 | X+(R) | |
| 45 | Y+(D) | |
| 46 | X- (L) | |
| 47 | Y- (U) | |

MI 0283QT-9A

VCC-SYS  R23  1K

Q1 BC846

VCC-SYS

LCD-BLED

D2 BAT43

Q2 BC846

R40 12

Q3 BC846

LCD-RST

VCC-3.3

E13 10uF

VCC-3.3  VCC-3.3

R24 10K   R25 10K

LCD-RST

LCD-CS#

PMD15
PMD14
PMD13
PMD12
PMD11
PMD10
PMD9
PMD8
PMD7
PMD6
PMD5
PMD4
PMD3
PMD2
PMD1
PMD0

PMRD
PMWR
LCD-RS
LCD-CS#

LCD-XL
LCD-YU

VCC-3.3   VCC-3.3

C21 18nF   R41 300K   C22 18nF   R42 300K

LCD-XR
LCD-YD
LCD-XL
LCD-YU