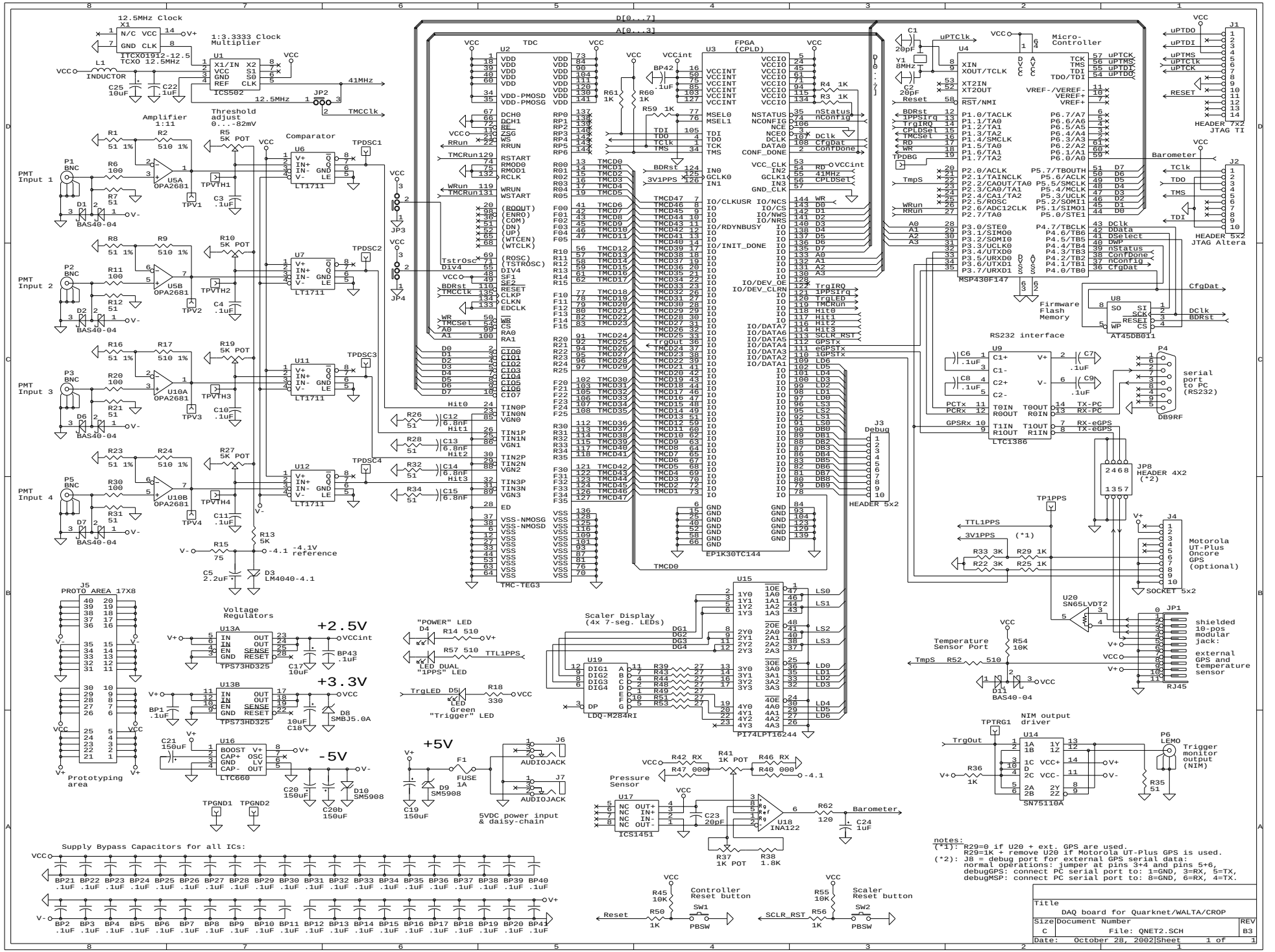
12.5MHz Clock
1:3.3333 Clock Multiplier
ITCXO1912-12.5 TCXO 12.5MHz
ICS502
INDUCTOR
41MHz
12.5MHz
TMCClk
Amplifier 1:11
Threshold adjust 0...-82mV
Comparator
PMT Input 1
PMT Input 2
PMT Input 3
PMT Input 4
OPA2681
LT1711
BAS40-04
TDC
TMC-TEG3
FPGA (CPLD)
EP1K30TC144
HEADER 5x2
Micro-Controller
MSP430F147
HEADER 7x2 JTAG TI
HEADER 5x2 JTAG Altera
Barometer
Firmware Flash Memory
AT45DB011
RS232 interface
LTC1386
DB9RF
serial port to PC (RS232)
JP8 HEADER 4X2 (*2)
Motorola UT-Plus Oncore GPS (optional)
SOCKET 5x2
PI74LPT16244
LDQ-M284RI
Scaler Display (4x 7-seg. LEDs)
SN65LVDT2
shielded 10-pos modular jack:
external GPS and temperature sensor
RJ45
Temperature Sensor Port
BAS40-04
NIM output driver
SN75110A
Trigger monitor output (NIM)
-4.1V reference
LM4040-4.1
PROTO AREA 17X8
Prototyping area
Voltage Regulators
TPS73HD325
+2.5V
+3.3V
-5V
LTC660
"POWER" LED
LED DUAL "1PPS" LED
LED Green "Trigger" LED
+5V
AUDIOJACK
5VDC power input & daisy-chain
Pressure Sensor
ICS1451
INA122
Controller Reset button
Scaler Reset button
Supply Bypass Capacitors for all ICs:
notes:
(*1): R29=0 if U20 + ext. GPS are used.
R29=1K + remove U20 if Motorola UT-Plus GPS is used.
(*2): J8 = debug port for external GPS serial data:
normal operations: jumper at pins 3+4 and pins 5+6,
debugGPS: connect PC serial port to: 1=GND, 3=RX, 5=TX,
debugMSP: connect PC serial port to: 8=GND, 6=RX, 4=TX.
Title
DAQ board for Quarknet/WALTA/CROP
Size C
Document Number
File: QNET2.SCH
REV B3
Date: October 28, 2002
Sheet 1 of 1