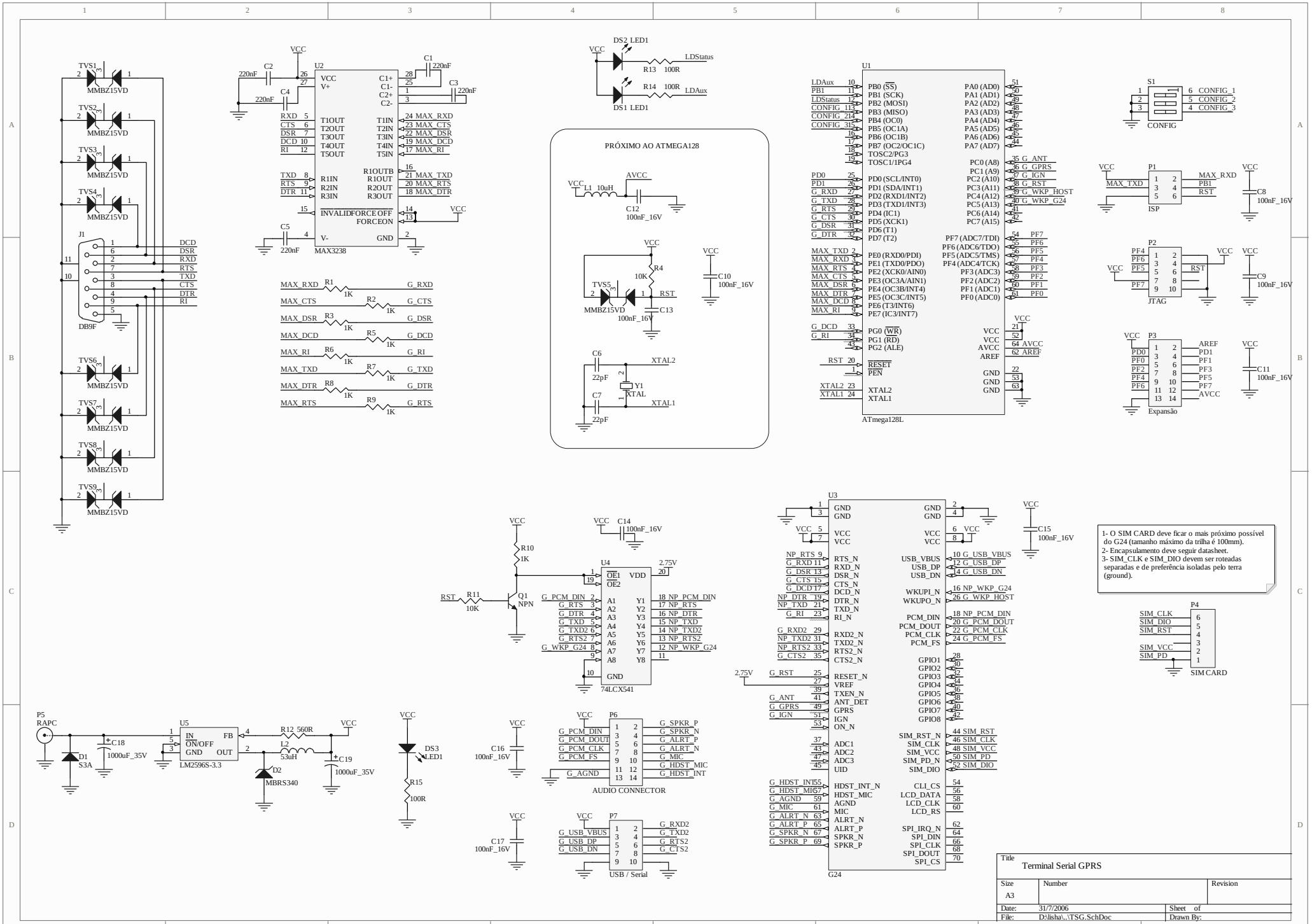
TVS1 MMBZ15VD
TVS2 MMBZ15VD
TVS3 MMBZ15VD
TVS4 MMBZ15VD
TVS5 MMBZ15VD
TVS6 MMBZ15VD
TVS7 MMBZ15VD
TVS8 MMBZ15VD
TVS9 MMBZ15VD
J1
DB9F
DCD
DSR
RXD
RTS
TXD
CTS
DTR
RI
U2
MAX3238
VCC
V+
C1+
C1-
C2+
C2-
T1OUT
T2OUT
T3OUT
T4OUT
T5OUT
T1IN
T2IN
T3IN
T4IN
T5IN
R1OUTB
R1OUT
R2OUT
R3OUT
R1IN
R2IN
R3IN
INVALID
FORCEOFF
FORCEON
V-
GND
MAX_RXD
MAX_CTS
MAX_DSR
MAX_DCD
MAX_RI
MAX_TXD
MAX_DTR
MAX_RTS
G_RXD
G_CTS
G_DSR
G_DCD
G_RI
G_TXD
G_DTR
G_RTS
DS2 LED1
DS1 LED1
LDStatus
LDAux
R13 100R
R14 100R
PRÓXIMO AO ATMEGA128
L1 10uH
AVCC
C12 100nF_16V
R4 10K
C10 100nF_16V
C13 100nF_16V
C6 22pF
C7 22pF
Y1 XTAL
XTAL2
XTAL1
U1
ATmega128L
PB0 (SS)
PB1 (SCK)
PB2 (MOSI)
PB3 (MISO)
PB4 (OC0)
PB5 (OC1A)
PB6 (OC1B)
PB7 (OC2/OC1C)
TOSC2/PG3
TOSC1/1PG4
PD0 (SCL/INT0)
PD1 (SDA/INT1)
PD2 (RXD1/INT2)
PD3 (TXD1/INT3)
PD4 (IC1)
PD5 (XCK1)
PD6 (T1)
PD7 (T2)
PE0 (RXD0/PDI)
PE1 (TXD0/PDO)
PE2 (XCK0/AIN0)
PE3 (OC3A/AIN1)
PE4 (OC3B/INT4)
PE5 (OC3C/INT5)
PE6 (T3/INT6)
PE7 (IC3/INT7)
PG0 (WR)
PG1 (RD)
PG2 (ALE)
RESET
PEN
PA0 (AD0)
PA1 (AD1)
PA2 (AD2)
PA3 (AD3)
PA4 (AD4)
PA5 (AD5)
PA6 (AD6)
PA7 (AD7)
PC0 (A8)
PC1 (A9)
PC2 (A10)
PC3 (A11)
PC4 (A12)
PC5 (A13)
PC6 (A14)
PC7 (A15)
PF7 (ADC7/TDI)
PF6 (ADC6/TDO)
PF5 (ADC5/TMS)
PF4 (ADC4/TCK)
PF3 (ADC3)
PF2 (ADC2)
PF1 (ADC1)
PF0 (ADC0)
VCC
AVCC
AREF
GND
G_ANT
G_GPRS
G_IGN
G_RST
G_WKP_HOST
G_WKP_G24
S1
CONFIG
CONFIG_1
CONFIG_2
CONFIG_3
P1
ISP
P2
JTAG
P3
Expansão
C8 100nF_16V
C9 100nF_16V
C11 100nF_16V
U3
G24
GND
VCC
RTS_N
RXD_N
DSR_N
CTS_N
DCD_N
DTR_N
TXD_N
RI_N
RXD2_N
TXD2_N
RTS2_N
CTS2_N
RESET_N
VREF
TXEN_N
ANT_DET
GPRS
IGN
ON_N
ADC1
ADC2
ADC3
UID
HDST_INT_N
HDST_MIC
AGND
MIC
ALRT_N
ALRT_P
SPKR_N
SPKR_P
USB_VBUS
USB_DP
USB_DN
WKUPI_N
WKUPO_N
PCM_DIN
PCM_DOUT
PCM_CLK
PCM_FS
GPIO1
GPIO2
GPIO3
GPIO4
GPIO5
GPIO6
GPIO7
GPIO8
SIM_RST_N
SIM_CLK
SIM_VCC
SIM_PD_N
SIM_DIO
CLI_CS
LCD_DATA
LCD_CLK
LCD_RS
SPI_IRQ_N
SPI_DIN
SPI_CLK
SPI_DOUT
SPI_CS
C15 100nF_16V
1- O SIM CARD deve ficar o mais próximo possível do G24 (tamanho máximo da trilha é 100mm).
2- Encapsulamento deve seguir datasheet.
3- SIM_CLK e SIM_DIO devem ser roteadas separadas e de preferência isoladas pelo terra (ground).
P4
SIM CARD
SIM_CLK
SIM_DIO
SIM_RST
SIM_VCC
SIM_PD
R10 1K
R11 10K
Q1 NPN
U4
74LCX541
OE1
OE2
VDD
A1
A2
A3
A4
A5
A6
A7
A8
Y1
Y2
Y3
Y4
Y5
Y6
Y7
Y8
G_PCM_DIN
G_RTS
G_DTR
G_TXD
G_TXD2
G_RTS2
G_WKP_G24
NP_PCM_DIN
NP_RTS
NP_DTR
NP_TXD
NP_TXD2
NP_RTS2
NP_WKP_G24
C14 100nF_16V
2.75V
P5 RAPC
D1 S3A
C18 1000uF_35V
U5 LM2596S-3.3
IN
ON/OFF
GND
FB
OUT
R12 560R
L2 53uH
D2 MBRS340
C19 1000uF_35V
DS3 LED1
R15 100R
C16 100nF_16V
P6
AUDIO CONNECTOR
G_PCM_DIN
G_PCM_DOUT
G_PCM_CLK
G_PCM_FS
G_AGND
G_SPKR_P
G_SPKR_N
G_ALRT_P
G_ALRT_N
G_MIC
G_HDST_MIC
G_HDST_INT
C17 100nF_16V
P7
USB / Serial
G_USB_VBUS
G_USB_DP
G_USB_DN
G_RXD2
G_TXD2
G_RTS2
G_CTS2
Title
Terminal Serial GPRS
Size
A3
Number
Revision
Date: 31/7/2006
Sheet of
File: D:\lisha\..\TSG.SchDoc
Drawn By: