POWER DIGITAL OUTPUT BOARDS GENERAL SCHEMAS

32 Bits 100MHz ARDUINO Microprocessor

2 Parallel port Connectors

32 bits Output Bus 8 bits Adress 8 bits DATA2 2 bits Control

Adress Latch

USB Input MIDI or DATA

MIDI in or DATA Input

8 bits Adress

8 bits Data

2bits Control

Opto-Isolator

4x64 OUTPUTS

OUT4x64 or OUT2x64 Boards
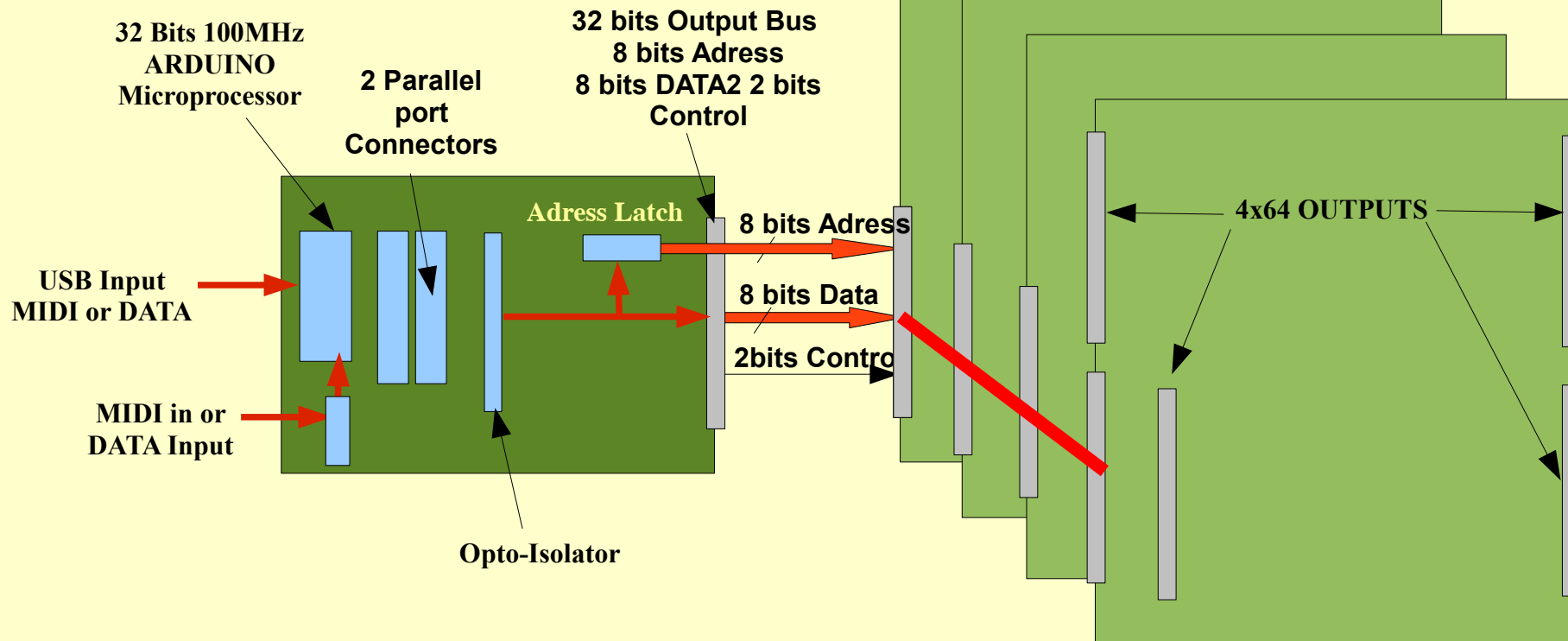
INPUTS : can be STANDARD MIDI, or USB MIDI or Parallel Port : **See boards on my website :** KI7_MIDI_USB for classic contacts or HALL effect sensors or KI6x8x8 for FATAR Matrixed keyboards

OUTPUTS : OUT2x64 boards can drive up to 7A per output. (Power Darlingtons included onboard) OUT4x64 boards can drive up to 7A via extra Darlingtons. Otherwise, 2803 darlingtons can be put onboard.

REMOTE CONTROL DATAS : Can be SERIAL standard MIDI messages, or SERIAL directly register datas or PARALLEL DATA composed by : ADDRESS, DATA, and 2 control lines : Strobe data and strobe address

Hybrid Organs : 2 programs are running in Parallel :

•A VPO program like GRAND ORGUE or HAUPTWERK or JORGAN . or a **module without computer** : For example the VISCOUNT expandor CM100 sampler : In this case, no PC is necessary, but the system is completely closed. (Some users have such a system with my technology)

•And my dedicated software : REAL PIPE ORGAN MODULE CONTROLLER which received MIDI inputs from my boards, outputs MIDI controls to the VPO program . **This program can run on a PC OR on my Arduino 32 bits, 100 to 180 MHz Microprocessor.**