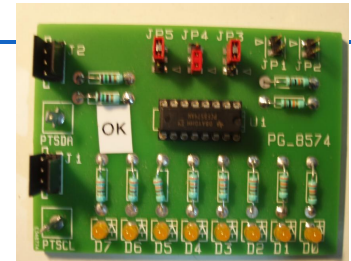


# MISE EN ŒUVRE INTERFACE PARALLELE

## Présentation du PCF8574



The PCA8574/74A provide general purpose remote I/O expansion for most microcontroller families via the two-line bidirectional I<sup>2</sup>C-bus (serial clock (SCL), serial data (SDA)).

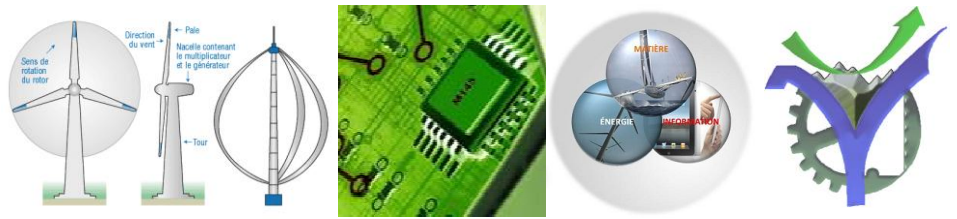
The devices consist of an 8-bit quasi-bidirectional port and an I<sup>2</sup>C-bus interface. The PCA8574/74A have low current consumption and include latched outputs with 25 mA high current drive capability for directly driving LEDs.

The PCA8574/74A also possess an interrupt line ( $\overline{\text{INT}}$ ) that can be connected to the interrupt logic of the microcontroller. By sending an interrupt signal on this line, the remote I/O can inform the microcontroller if there is incoming data on its ports without having to communicate via the I<sup>2</sup>C-bus.

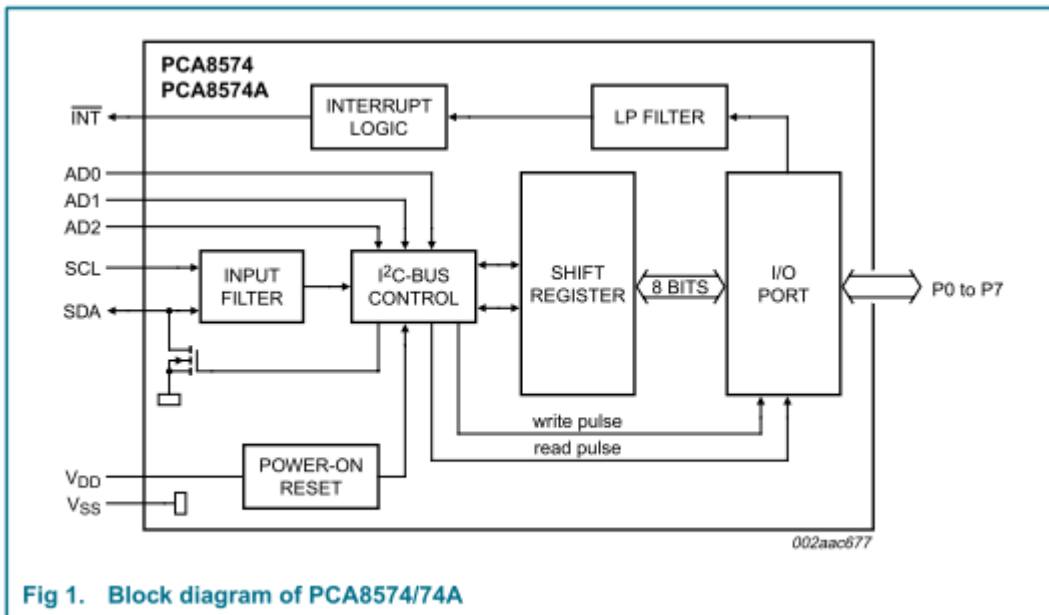
The internal Power-On Reset (POR) initializes the I/Os as inputs.

### Caractéristiques :

- 400 kHz I<sup>2</sup>C-bus interface
- 2.3 V to 5.5 V operation with 5.5 V tolerant I/Os
- 8-bit remote I/O pins that default to inputs at power-up
- Latched outputs with 25 mA sink capability for directly driving LEDs
- Total package sink capability of 200 mA
- Active LOW open-drain interrupt output
- 8 programmable slave addresses using 3 address pins
- Readable device ID (manufacturer, device type, and revision)
- Low standby current (10  $\mu$ A max.)
- -40 °C to +85 °C operation
- ESD protection exceeds 2000 V HBM per JESD22-A114, 200 V MM per JESD22-A115, and 1000 V CDM per JESD22-C101
- Latch-up testing is done to JEDEC standard JESD78 which exceeds 100 mA
- Packages offered: DIP16, SO16, TSSOP16, SSOP20



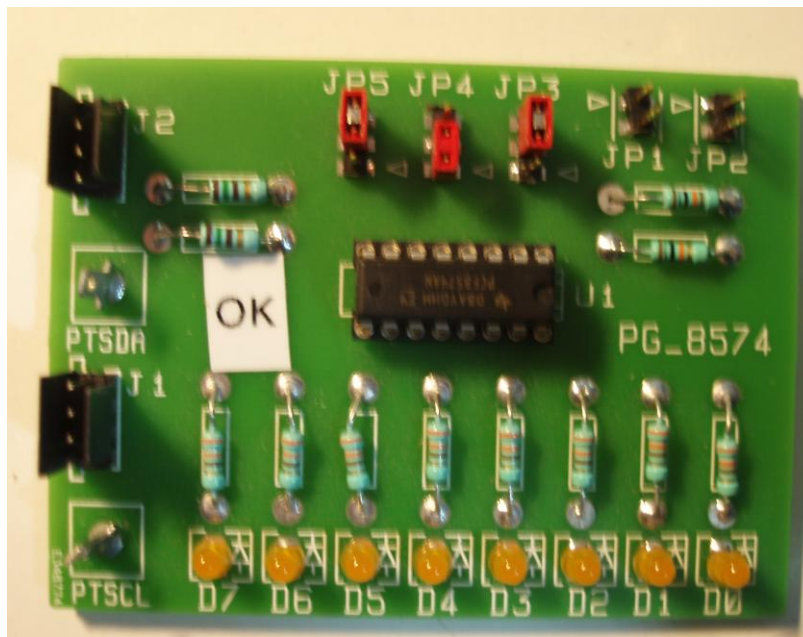
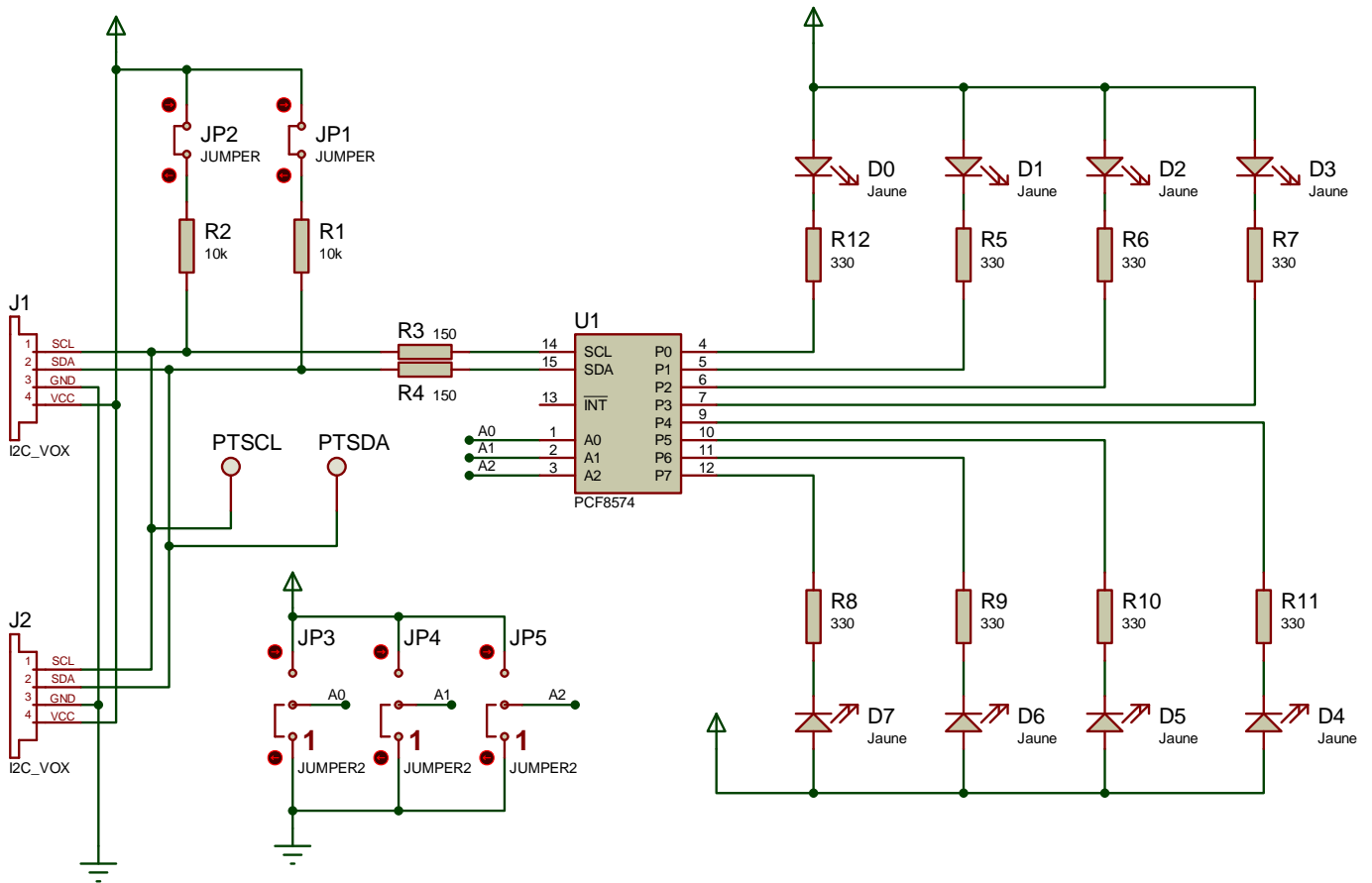
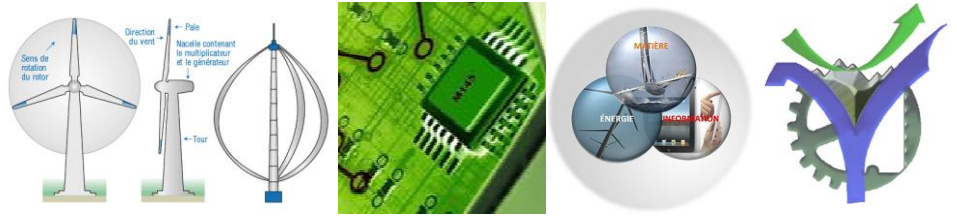
## Bloc diagramme

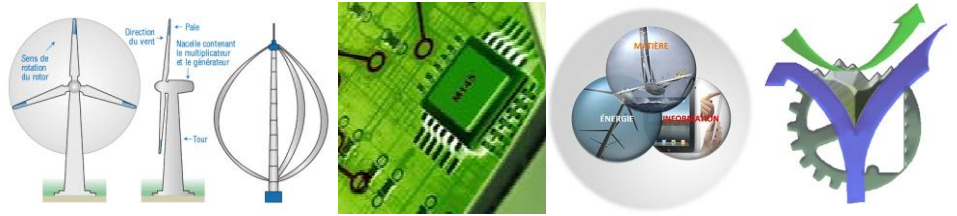


## Domaine d'utilisation

- LED signs and displays
- Servers
- Industrial control
- Medical equipment
- PLCs
- Cellular telephones
- Gaming machines
- Instrumentation and test measurement

## Schéma :





## Mise en œuvre

☞ réaliser un chenillard qui change de sens avec l'appui sur un bouton poussoir.