

## ■ Exercise

**Use documentation (data sheet / reference manual) to answer the following questions using a STM32F429 LQFP144**

- What are the pin numbers (0-144) for GPIO Port A.3 and E.1?
- What is the address of the register GPIOA\_OTYPER?

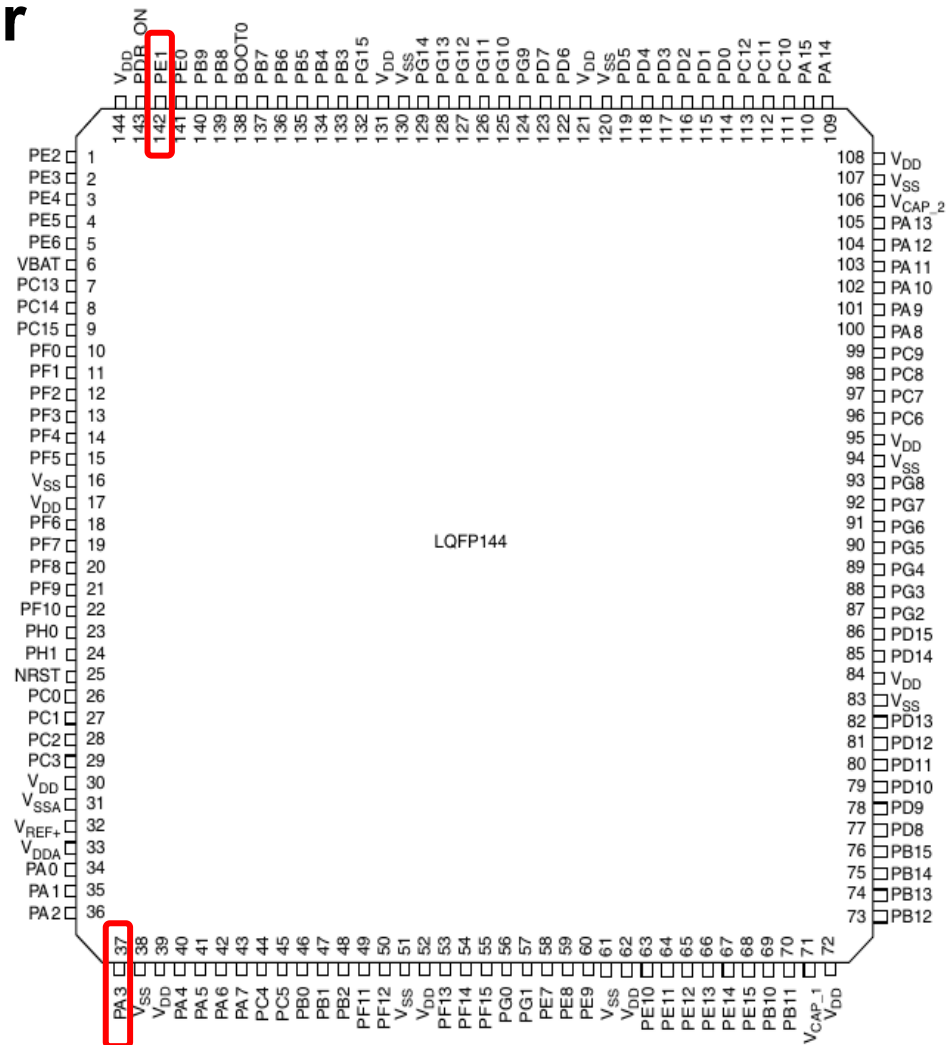
# Working with Documents

## ■ What is the pin number for GPIO Port A.3?

**Port A.3: Pin 37**  
**Port E.1: Pin 142**

## ■ Solution:

- Datasheet
  - page 19
  - page 46



# Working with Documents

## ■ What is the address of the register GPIOA\_OTYPER?

Base Address GPIOA            0x4002 0000  
Offset GPIOx\_OTYPER        0x0000 0004  
-----  
Register address            0x4002 0004

## ■ Solution

- Reference manual
  - page 65
  - Page 279

Boundary address	Peripheral
0x4002 2800 - 0x4002 2BFF	GPIOK
0x4002 2400 - 0x4002 27FF	GPIOJ
0x4002 2000 - 0x4002 23FF	GPIOI
0x4002 1C00 - 0x4002 1FFF	GPIOH
0x4002 1800 - 0x4002 1BFF	GPIOG
0x4002 1400 - 0x4002 17FF	GPIOF
0x4002 1000 - 0x4002 13FF	GPIOE
0x4002 0C00 - 0x4002 0FFF	GPIOD
0x4002 0800 - 0x4002 0BFF	GPIOC
0x4002 0400 - 0x4002 07FF	GPIOB
0x4002 0000 - 0x4002 03FF	GPIOA