ATA6563 click
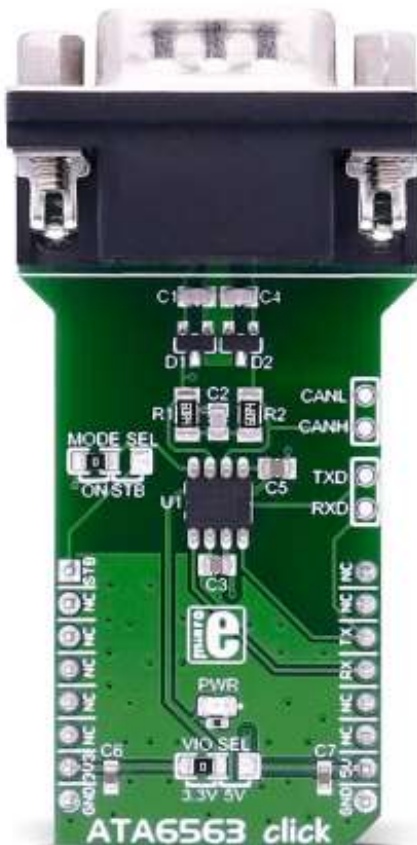
PID: MIKROE-2334

ATA6563 click carries the ATA6563 high-speed CAN transceiver. The click is designed to run on a 5V power supply. Use the VIO SEL jumper for selecting the 3.3V or 5V logic level.
It communicates with the target microcontroller over UART interface, with additional functionality provided by the AN pin on the mikroBUS™ line.

ATA6563 features

The ATA6563 is a high-speed CAN transceiver that provides an interface between a controller area network (CAN) protocol controller and the physical two-wire CAN bus.

The transceiver is designed for high-speed (**up to 5 Mbps**) CAN applications in the automotive industry, providing differential transmit and receive capability to (a microcontroller with) a CAN protocol controller. It offers improved electromagnetic compatibility (EMC) and electrostatic discharge (ESD) performance.

The transceiver is **CAN FD** (Flexible data-rate) ready, meaning it has increased data rates in comparison with classic CAN.

How the click works
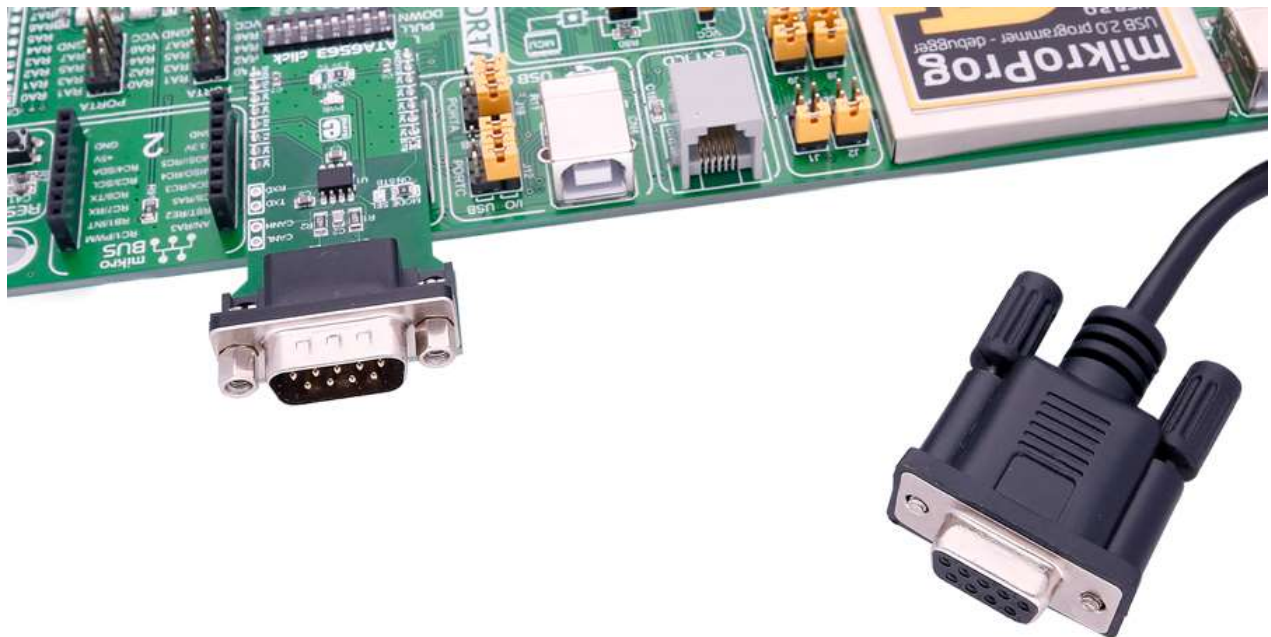
ATA6563 click is connected to a CAN bus via the DB9 cable, which then communicates with the network.

Specifications

Type	CAN
Applications	Classical CAN and CAN FD networks in Automotive, Industrial, Aerospace, Medical and Consumer applications.
On-board modules	ATA6563 high-speed CAN transceiver from Microchip
Key Features	Optimized for CAN FD at 2 and 5 Mbps operation, maximum propagation delay: 210ns; the chip supports CAN 2.0 and CAN with flexible data rates.
Interface	UART
Input Voltage	3.3V or 5V
Click board size	L (57.15 x 25.4 mm)

Pinout diagram

This table shows how the pinout on **ATA6563 click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin	mikro BUS		Pin	Notes
Standby select	**STBY**	1 AN	PWM 16	NC	
	NC	2 RST	INT 15	NC	
	NC	3 CS	TX 14	**RX**	UART data receive
	NC	4 SCK	RX 13	**TX**	UART data transmit
	NC	5 MISO	SCL 12	NC	
	NC	6 MOSI	SDA 11	NC	
Power supply	**+3.3V**	7 3.3V	5V 10	**+5V**	Power supply
Ground	**GND**	8 GND	GND 9	**GND**	Ground

Jumpers and settings

Designator	Name	Default Position	Default Option	Description
JP1	VIO SEL	Left	3V3	VIO Supply Voltage Selection 3V3/5V, left position 3V3, right position 5V
JP2	MODE SEL	Left	ON	Selection of the standby feature; default is always on, right option switches to the STB pin on the mikroBUS™

Additional pins

Name	I/O	Description
CANL	I/O	CAN lines, same as on DB9 connector
CANH	I/O	CAN lines, same as on DB9 connector
TXD	I	UART lines, same as on the mikroBUS™
RXD	O	UART lines, same as on the mikroBUS™