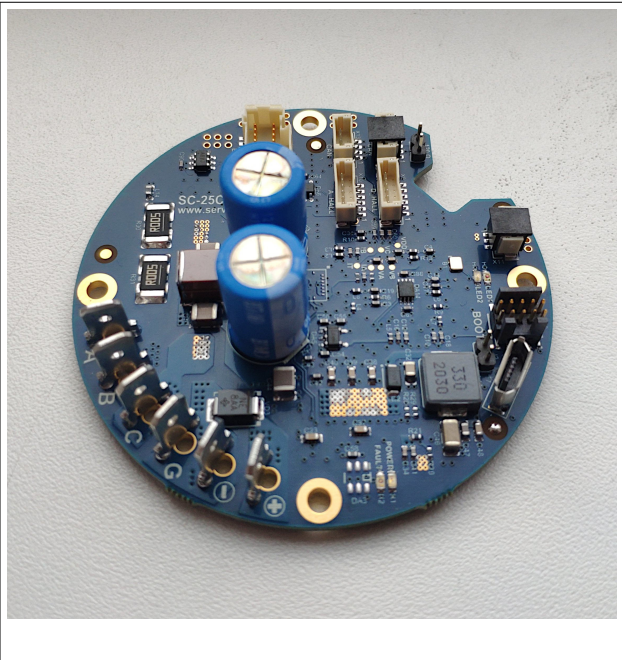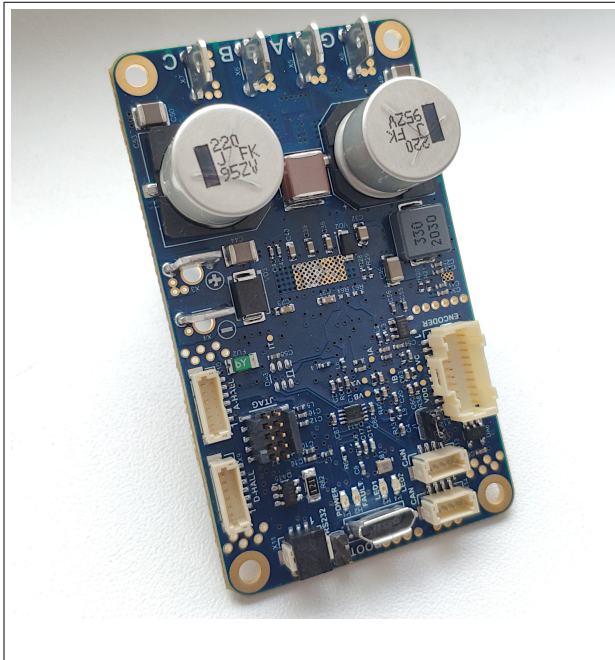# Connecting AMS AS5048A/AS5048B encoders to Servosila SC-25 Brushless Motor Controller

Technical Note

Revision B

February, 2023

Table of Contents

Introduction

The AMS AS5048A or AS5048B are absolute position encodes with a 14-bit resolution output.

PWM output interface of the encoder

This note is written in regards to PWM output interface of the encoders. When making a cable, refer to the datasheets of both devices to match PWM pins of the corresponding connectors.

PWM configuration settings

The following configuration settings of the PWM interface of Servosila SC-25 controllers have been found to work with the AMS AS5048A encoders.

Peripheral: PWM Encoder			
counts per revolution	4096	counts	
encoder bias vs. electrical position	0	counts	
inverted installation	0	0 or 1	
PWM capture interface	0	0 or 1	Power Cycle
pulse period	4119	sec or clocks	
max pulse width (angle=360 deg)	4103	sec or clocks	
min pulse width (angle=0 deg)	8	sec or clocks	
polarity inversion	1	0 or 1	Power Cycle

Servo drives designed around SERVOSILA SC-25C brushless motor controllers

YouTube: http://www.youtube.com/user/servosila

www.servosila.com/en/motion-control