Certification Test

CT.Sigma-7.01.eLM.ExternalEncoder.CertificationTest

Student Name: _____

Company Name: _____

Address: _____

Phone: _____

Email: _____

Test Date: _____

Answers:

1				
2				
3				
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10				
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12				
13				
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15				

Taking the Test

- The purpose of this test is to validate the learning experience corresponding to the applicable eLearning Module. It is recommended to preview the questions before viewing the module, and answer them as the module progresses.

- The test is open book. You may use any website, manuals, software, demo, etc. The test must be taken individually; you may not contact another person for help.

- Each question has only one correct answer unless otherwise noted. Please clearly record all answers on the answer sheet. All questions are equally weighted. A passing score is 90%.

Returning the Test

- Please return **only the first page** of the test (the answer sheet) with completed answers and contact information.

Option 1: Fax the answer sheet to **Yaskawa Technical Training Services** at **(847) 887-7185.**
Option 2: e-mail a scan, photo, or edited pdf of the answer sheet with all answers and contact information to **training@yaskawa.com**.

Receiving Your Score

You may review your answers only if a passing score is received. You will receive a system-generated email with your score. Please allow up to 5 business days.

How to setup 1.5 axis Operation

1. Which option card supports Yaskawa Serial Protocol encoders?
   A. Full Closed Loop
   B. Feedback option card Type 1
   C. Feedback option card Type 3
   D. MP2600iec
   E. A,B
   F. B,C
   G. C,D
   H. B,C,D

2. Which option card supports TTL quadrature encoders?
   A. Full Closed Loop
   B. Feedback option card Type 1
   C. Feedback option card Type 3
   D. MP2600iec
   E. A,B
   F. B,C
   G. C,D
   H. B,C,D

3. Which parameter enables the external axis functionality on the Sigma-7Siec?
   A. Pn001.4
   B. Pn00E.3
   C. Pn432
   D. Pn520

4. Which of the following are required for Dual Feedback functionality on the Sigma-7Siec?
   A. 400v only
   B. 6 KW and higher
   C. Amplifier firmware version 0024
   D. Controller firmware version 3.7.0
   E. A,C
   F. C,D
   G. All of the above
   H. None of the above

5. How many encoders can be latched simultaneously on the Sigma-7Siec?
   A. 0
   B. 1
   C. 2
   D. 3

6. What needs to be done to clear the A.CF1 alarm after Pn00E.3 is set to 1 or 3?
   A. Reboot the controller
   B. Check the wiring of the encoder
   C. Load the Manufacturing file into the Feedback option card.
   D. Replace the encoder
   E. Reset the absolute encoder

7. Which function in SigmaWin+ ver7 loads the Encoder Manufacturing file
   A. Edit Parameters
   B. Product Information
   C. Motor parameter scale write
   D. Motor parameter servopack write

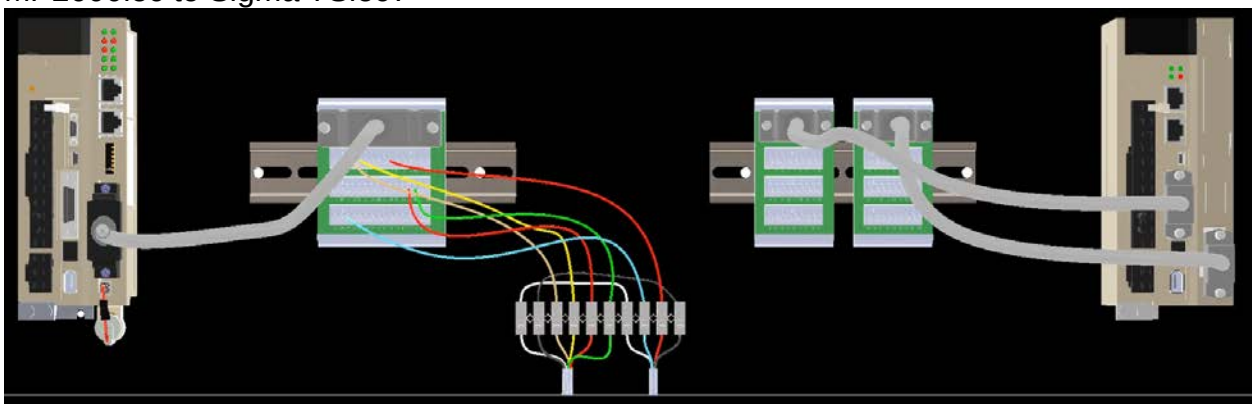
MP2600iec to Sigma-7Siec with Feedback Option Card

8. Which product requires the Feedback option card for Dual Feedback applications
   A. SGD7S MP2600iec
   B. SGD7S Sigma-7Siec
   C. SGD7S Analog
   D. SGD7S EtherCAT
   E. SigmaLogic7 Compact

9. Which option card(s) do not provide encoder power?
   A. MP2600iec
   B. Feedback option card Type 1
   C. Feedback option card Type 3
   D. Full Closed loop
   E. All the above
   F. None of the above

10. What steps required to convert from the MP2600iec to the Sigma-7Siec?
    A. Adjust wiring
    B. Adjust Hardware Configuration
    C. Load encoder manufacturing file
    D. Adjust project code for I/O changes
    E. All the above
    F. A,B,D
    G. A,B,C
    H. None of the above

11. What I/O and encoder wiring changes are required when converting from MP2600iec to Sigma-7Siec?



A. All MP2600iec I/O needs to be moved to Sigma7 amplifier or external I/O
B. Move encoder input to Sigma7 amplifier I/O
C. Move encoder input to the Feedback Type 3 option card
D. Move encoder input to the Feedback Type 1 option card
E. Move Latch input to the Feedback Type1 or 3 option card
F. A, B
G. A, C
H. A, D
I. C, E

12. What steps are required to obtain the encoder Manufacturing (.mgf) file?
A. Encoder manufacturer website
B. Yaskawa representative
C. Yaskawa Regional Motion Engineer
D. Yaskawa website
E. B, C
F. A, D

13. Which cables on the MP2600iec controller can be transferred directly over to the Sigma-7Siec?
A. Input power
B. Motor
C. MP2600iec I/O
D. Motor encoder
E. Safety Input
F. All except C
G. All except D
H. All of the above

14. Which product(s) can be used for dual feedback applications with 400V amplifiers?
A. Sigma-7Siec
B. MP2600iec
C. Both

15. An MP2600iec application uses both the analog input and analog output. How is this converted to the Sigma7Siec?
    A. Convert directly using the Sigma-7Siec built-in analog I/O
    B. Use external remote I/O such as Yaskawa SLIO
    C. Attach LIO card to Sigma-7Siec
    D. Conversion is not possible