

Certification Test

CT.MP3200iec.01.eLM.HardwareOverview.CertificationTe



Student Name: _____

Company Name: _____

Address: _____

Phone: _____

Email: _____

Test Date: _____

Answers:

1	_____	_____	_____	_____
2	_____	_____	_____	_____
3	_____	_____	_____	_____
4	_____	_____	_____	_____
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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.

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1. What is the maximum number of servo axes that can be controlled by the MP3200iec over Mechatrolink-III?
 - A. 16
 - B. 26
 - C. 32
 - D. 62
 - E. 64
 - F. 224
 - G. 256
 - H. 262
2. The MP3200iec is approximately how many times faster than the MP2300iec controllers?
 - A. 2 times faster
 - B. 4 times faster
 - C. 8 times faster
 - D. 16 times faster
 - E. 62 times faster
3. According to the table given in the eLM, what update rate is possible for 4 axes?
 - A. 32.5 microseconds
 - B. 0.25 MS
 - C. 0.5 ms
 - D. 1 ms
 - E. 2 ms
 - F. 4 ms
4. How many “Basic Units” are required to comprise an **operable** MP3200iec system?
 - A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
 - F. 8

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5. What power supply voltages are supported?
 - A. 12 V DC
 - B. 24 V DC
 - C. 110 V AC
 - D. 220 V AC
 - E. 480 V AC
 - F. All of the above
 - G. B, C, and D only
 - H. A, B and C only
 - I. C, D, and E only
6. The RLYOUT terminals are closed when which LED is on?
 - A. RDY
 - B. RUN
 - C. ALM
 - D. ERR
 - E. M-ALM
 - F. RLY
 - G. R2D2
7. Which dipswitch causes the controller IP address to be displayed?
 - A. STOP
 - B. E-INIT
 - C. INT
 - D. CNFG
 - E. LOAD
 - F. D-RST
 - G. E-PM0
 - H. E-PM1
 - I. TEST
 - J. MNT
8. What is the function of the rotary switches?
 - A. Sets the MECHATROLINK address
 - B. Sets the serial baud rate
 - C. Sets the IP address override
9. What is the function of the battery inside the CPU unit?
 - A. Powers the absolute encoders while power is off
 - B. Stores retain variable data in memory
 - C. Provides power to optically isolated I/O circuits
 - D. Allows the controller to continue operation while power is off

10. What is the highest number of slots that a single option base can accommodate?
 - A. 3 slots
 - B. 5 slots
 - C. 8 slots
 - D. 62 slots

11. Which I/O option card provides both analog I/O and digital I/O with encoder input?
 - A. LIO-01
 - B. LIO-02
 - C. LIO-03
 - D. LIO-04
 - E. LIO-06
 - F. AI-01
 - G. AO-01
 - H. DO-01
 - I. 218IF-Y1

12. According to the table in the eLM, what terminal block conversion kit applies to the LIO-06?
 - A. CBK-U-MP2A-xx
 - B. CBK-U-MP2B-xx
 - C. SBK-U-VBA-xx

13. What quality is MECHATROLINK-III optimized for?
 - A. Highest number of nodes on the network
 - B. Fastest possible network update time
 - C. Longest distance between nodes
 - D. Most reliable data transfer in electrically noisy environments

14. What strategy is employed by MECHATROLINK-III in order to reduce the possibility of data loss?
 - A. Fast network update time
 - B. Data Retry
 - C. Ethernet CAT-5 physical layer

15. What is the baud rate of MECHATROLINK-III?
 - A. 10 Mbps
 - B. 100 Mbps
 - C. 1000 Mbps
 - D. 10000 Mbps

16. What network topologies are supported by MECHATROLINK-III?
 - A. Cascade
 - B. Star
 - C. Ring
 - D. All of the above
 - E. A and B only
 - F. B and C only

17. What software is required for a PC to access the controller's built-in web server?
- A. MotionWorks IEC
 - B. SigmaWin +
 - C. Internet Explorer and Java 6
 - D. All of the above
 - E. A and B only
 - F. No software is required
18. What functions can be accomplished through the web server?
- A. Upgrade firmware
 - B. Troubleshoot alarms
 - C. Monitor and graph motion
 - D. Test servo motion
 - E. Restore servo parameters
 - F. Backup and Restore Project
 - G. Edit and monitor the code
 - H. All of the above
 - I. A-F above
 - J. B-H above
19. What programming software is used for all MPiec controllers?
- A. MotionWorks
 - B. MotionWorks IEC
 - C. PLCopen
 - D. IEC61131-3
 - E. Application Toolboxes
20. Application code can be scaled up or down between the MP3200iec and which other MPiec motion controllers?
- A. MP2600iec
 - B. MP2300Siec
 - C. MP2310iec
 - D. All MPiec motion controllers
21. The MP3200iec can be used with which Yaskawa servos?
- A. Sigma-2 with NS115 (Mechatrolink II)
 - B. Sigma-3 (Mechatrolink II)
 - C. Sigma-5 (Mechatrolink II)
 - D. Sigma-5 (Mechatrolink III)

22. What is the minimum version of MotionWorks IEC that is compatible with the MP3200iec?
- A. Version 1.0
 - B. Version 2.0
 - C. Version 2.4
 - D. Version 2.5
 - E. Version 3.0
 - F. Version 3.2
23. According to the eLM, what can be accomplished by simultaneously capturing two positions from the same servo axis at high speed?
- A. Measure product length with a sensor
 - B. Control up to four servos at 0.25 ms
 - C. Scale control systems and create code libraries
24. What is the lowest logical axis number and node number found in MotionWorks IEC Hardware Configuration for Mechatrolink III servo axes?
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
 - F. 26
25. What new MotionWorks IEC Hardware Configuration data applies **ONLY** to Mechatrolink-III ?
- A. Axis parameter copy/paste
 - B. Node #
 - C. Part #
 - D. Configured Response Time