



## 1 General

### 1.1 Introduction and Intended Use (Informative)

### 1.2 References

This standard should be interpreted in the context of the following NMRA Standards.

#### 5 1.2.1 Normative

- S-9.1.1 Decoder Interfaces
- S-9.1.1.2 JST 9 Pin Interface
- S-9.1.1.3 21MTC Interface
- S-9.1.1.4 PluX Interface
- 10 • S-9.1.1.5 Next18 and Next18-S Decoder Interface

### 1.3 Terminology

Term	Definition
Decoder	DCC receiver for controlling vehicle animation.
System Board	Electronic circuit board that is considered part of the vehicle with a decoder is intended to be plugged into.

## 2 Connector Sources

These are known valid connector sources for the various DCC decoder interface standards. Other sources may also be valid.

### 15 2.1 JST 9 Pin Interface

#### 2.1.1 Decoder

Manufacturer	Part Number	Notes
JST Sales America Inc.	S9B-ZR-SM2-TF	

#### 2.1.2 System Board (Wire Harness)

Manufacturer	Part Number	Notes
JST Sales America Inc.	09ZR-3H-P	

## 2.2 21MTC Interface

### 20 2.2.1 Decoder

Manufacturer	Part Number	Notes
Samtec	CPL-111-02-F-D	
Aptos Technology	SPNBF-22-X-X-X-FG	

### 2.2.2 System Board

Manufacturer	Part Number	Notes
Samtec	FTSH-111-01-F-DV	
Samtec	FTS-111-01-F-D	through hole

## 2.3 PluX22 Interface

### 2.3.1 Decoder

Manufacturer	Part Number	Notes
Samtec	FTSH-111-01-F-DV	
Samtec	FTS-111-01-F-D	through hole

### 2.3.2 System Board

Manufacturer	Part Number	Notes
Samtec	CPL-111-02-F-D	
Aptos Technology	SPNBF-22-X-X-X-FG	

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## 2.4 Next18 and Next18-S Interface

### 2.4.1 Decoder

Manufacturer	Part Number	Notes
Morethanall Co, LTD	NP0519-P05P-018-LF	
Coratec GmbH & Co. KG	CT0519P-05-2x09P	
Degson Electronics Co., Ltd.	CT0519P-05-2x09P	
Wentever	WT035-018	no website found

- 30 Note: The Panasonic AXK6 series is not a valid connector. It is a close friction fit, but does not have the required positive mating “snap” when mated to the other valid connector options.

### 2.4.2 System Board

Manufacturer	Part Number	Notes
Morethanall Co, LTD	NP0519-S10P-018-LF	
Coratec GmbH & Co. KG	CT0519S-10-2x09P	
Degson Electronics Co., Ltd.	CT0519S-10-2x09P	
Wentever	WT036-018	no website found

- 35 Note: The Panasonic AXK5 series is not a valid connector. It is a close friction fit, but does not have the required positive mating “snap” when mated to the other valid connector options.

## 2.5 Manufacturer Websites

Manufacturer	Part Number
JST Sales America Inc.	<a href="http://www.jst.com">www.jst.com</a>
Samtec	<a href="http://www.samtec.com">www.samtec.com</a>
Aptos Technology	<a href="http://www.aptostechnology.com">www.aptostechnology.com</a>
Morethanall Co., LTD	<a href="http://www.morthanall.com">www.morthanall.com</a>
Coratec GmbH & Co. KG	<a href="http://www.coratec.de">www.coratec.de</a>
Degson Electronics Co., Ltd.	<a href="http://www.degson.com">www.degson.com</a>
Wentever	no website found

### 3 Document History

Date	Description
Jan 2008	First Revision

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