# General

## Introduction and Intended Use (Informative)

## References

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

### 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
* S-9.1.1.5 Next18 and Next18-S Decoder Interface

## 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. |

# Connector Sources

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

## JST 9 Pin Interface

### Decoder

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

### System Board (Wire Harness)

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

## 21MTC Interface

### Decoder

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

### System Board

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

## PluX22 Interface

### Decoder

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

### System Board

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

## Next18 and Next18-S Interface

### 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 |

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.

### 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 |

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.

## Manufacturer Websites

|  |  |
| --- | --- |
| **Manufacturer** | **Part Number** |
| JST Sales America Inc. | [www.jst.com](http://www.jst.com) |
| Samtec | [www.samtec.com](http://www.samtec.com) |
| Aptos Technology | [www.aptostechnology.com](http://www.aptostechnology.com) |
| Morethanall Co., LTD | [www.morthanall.com](http://www.morthanall.com) |
| Coratec GmbH & Co. KG | [www.coratec.de](http://www.coratec.de) |
| Degson Electronics Co., Ltd. | [www.degson.com](http://www.degson.com) |
| Wentever | no website found |

# Document History

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| **Date** | **Description** |
| Jan 2008 | First Revision |
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