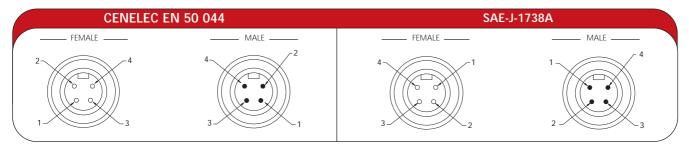
Pin Numbering Conventions:

There are two conventions that determine which PIN numbers are located with respect to the keyway. These are **CENELEC EN 50 044** and **SAE-J-1738A**.

In almost every case, except for 4-pole Mini-Change® connections, these two conventions agree with one another. This affects DeviceNet™ installations where the 4-pole Mini-Change connector is used to bring auxiliary power to I/O modules and other devices.

The two pinout conventions are shown below. While Brad Harrison® pins out its DeviceNet 4-pole Mini-Change auxiliary power connections per the SAE convention as standard, conventional CENELEC versions are available.



Terms and Definitions:

10BASE-T (as a transmission medium)

A network running at 10 Mbps, using baseband technology and twisted pair cabling.

10BASE-T (as a wiring sequence)

A variation of 568A wiring, omitting the two wire pairs used for voice transmission.

100BASE-F

A network running at 100 Mbps, using baseband technology and fiber-optic cabling.

100BASE-T

A network running at 100 Mbps, using baseband technology and twisted pair cabling.

110 Punchdown Block

A standard Insulation Displacement Connection (IDC) used to field terminate cable to a receptacle.

802.3

The upper level IEEE working group responsible for the standards associated with Ethernet and other CSMA/CD networks.

Active or Intelligent Device

Devices that can be connected as nodes, with unique MAC IDs, to a DeviceNet™ system. These devices can provide diagnostics including troubleshooting.

Application Layer

The software portion of a bus which determines the system's attributes. For DeviceNet™, defines how identifiers are assigned (controlling priorities) and how a CAN data field is used to specify services, move data and determine that data's meaning.

Arbitration (mechanism)

Resolves potential network conflicts between nodes without loss of data or bandwidth. For DeviceNet TM , a bit wise, non-destructive arbitration method is used.

ASI

Actuator Sensor Interface.

ASIC

Application-Specific Integrated Circuit – A semiconductor designed to perform a particular function by defining the interconnection of a set of basic building blocks drawn from a library provided by the circuit manufacturer.

Assembly Object

Differing application objects grouped into a single attribute which can be moved with a single message.

Attenuation

Amplitude dissipation of an electrical signal as it travels over distance, expressed in decibels.

AUTOBAUD

Feature on DeviceNet™ active devices that sets their data rate to the correct value when connected to an existing network.

Auto-Negotiate (Auto-Sense)

Part of the 802.3u specification which details how devices at either end of a link advertise to the other their connection mode (speed and duplex that can be supported). Should both devices be equipped with Auto-Negotiate (vendor optional), they will select the highest common protocol for communication. Also referred to as Auto-Sense.

AWG

American Wire Gauge – A standard used to define the physical size of a conductor determined by its circular mil area (1 mil = .001).

AWM

Appliance Wiring Material.

Baseband

A communication network that transmits data over a single carrier frequency.

Baud

A data transmission measurement for modems

Baud Rate

Measurement of data transfer speed (1 baud = 1bit per second)

Bit

A single character of a language having just two characters, as either of the binary digits 0 or 1.

Bit Bus

A bus architecture that communicates the minimum amount of information possible through a bus. Does not accommodate diagnostics.

Bus

A parallel circuit that connects the major components of an architecture, allowing the transfer of electric impulses from one connected component to any other.

Byte

A sequence of 8 bits (enough to represent one character of alphanumeric data) processed as a single unit of information.

CAN

Controller Area Network – An ASIC used by DeviceNet $^{\rm TM}$ and Smart Distributed Systems.

Capacitance

Storage of electrically separated charges between two plates (or wires). Unbalance, in the case of a data wire pair, results in the transfer of unwanted signals.

Category 5/5E

A TIA/EIA rating system that describes the physical properties of the communication channel in relation to its performance at specific communication speeds.

Change-of-State

Type of messaging where the device produces data only when there is a change.

CL2

Designation of cable which meets the vertical tray flame test for class 2 systems.

Collision Domain

The group of nodes that are attached to the network in such a way that only one of those nodes can be transmitting at any one time. Nodes connected together using repeater hubs usually belong to a single collision domain, while those attached by a switching hub are generally isolated from the collision domain.

Composite Cable

A cable consisting of two or more types or sizes of wire.

CRC

Cyclic Redundancy Code – An error correction code that is recorded in each sector of a magnetic disk and used to catch errors in data.

CSA

Canadian Standards Association.

CSMA/CE

Carrier Sense Multiple Access/Collision Detect – The media access method used in Ethernet architectures. All network nodes are able to detect the presence of a signal on the channel (Carrier Sense). Once the network is clear, all nodes with something to transmit vie equally for access to the channel (Multiple Access). If a node detects another signal during its transmission, the signals collide, both nodes back-off and retry at a random amount of time later (Collision Detect).

Cyclic Option

The device set-up to report its data on a regular basis, consistent with the rate of change it can detect.

Daisy Chain

A bus wiring scheme in which, for example, device A is wired to device B, device B is wired to device C, etc. All devices may receive identical signals or, in contrast to a simple bus, each device in the chain may modify one or more signals before passing them down the line.

Device Object

A DeviceNet[™] product will have a single instance of a DeviceNet[™] object. The instance will have the following attributes: node, address (MAC ID), baud rate, bus-off action, bus-off center, allocation choice and MAC ID.

Device Profile

Fully defines the device as viewed from the network. DeviceNet $^{\text{TM}}$ specifications contain such profiles.

Diagnostics

Relaying of information regarding the various states or conditions of certain controls back to the PLC or PC.

Drain Wire

In a cable, an uninsulated wire laid over components and used as a ground connection.

Drop Cable

Cable that exits a trunk cable and runs to a control.

EDS (Electronic Data Sheet)

An electronic version of a device's configurable parameters and public interfaces to the correct parameters.

Ethernet/IP

A networking protocol which uses Ethernet for the physical and media access layer, and incorporates the CIP (Controller Information Protocol) from DeviceNetTM as the application layer.

Explicit Messages

Provide a multi-purpose pt-pt commission path between two devices. These messages are typically used for low-priority identifiers and contain the specific meaning of the message right in the data field. This usually means the service to be performed, as well as the specific object attribute address, is imbedded herein.

Fast Ethernet

An Ethernet network operating at 100 Mbps.

Fiber-Optic Cable

A transmission medium using a central glass fiber which transmits digital signals, generated from a laser or LED, expressed as light pulses.

FT1

A vertical flammability rating for wires and cable developed by CSA.

FT4

A vertical flammability rating for wires and cable developed by CSA that is more sever than FT1

Full-Duplex Media

Supports both transmission and reception of a signal at the same time. These nodes effectively double their available bandwidth.

Horizontal Cross-Connect

A cabling system that extends from communications equipment to the work area outlet.

lub

The focal point in a messaging handling service, a number of local computers might exchange messages solely with a hub (or focal point) computer. Would be responsible for exchanging messages with other hubs and non-local computers.

Hz

Hertz - Cycles per second

I/O

Input/Output

I/O Messages

Apply to time-critical, control-oriented data. They provide a dedicated, special purpose commission path between producers and consumers of data on a network.

Identity Object

Typically, a single instance for each DeviceNet $^{\text{TM}}$ product. Attributes will be vendor ID, device type, product code, revision, status, S/N, product name and statistics.

IEC

International Electro-technical Commission.

Impedance

The apparent resistance in an electrical circuit to the flow of an alternating current, similar to the actual electrical resistance to a direct current, keeping the ratio of electromotive force to the current.

Interoperability

The ability of two or more differing systems or controls to communicate.

ΙP

Internet Protocol – The Network Layer, 24-bit addressing scheme used by most Ethernet networks

ISO

International Standards Organization.

MAC ID

Assigned as the address of nodes on a DeviceNetTM network. DeviceNetTM uses a device address inside the CAN identifier field and it represents a mechanism for detecting duplicated addressed devices.

Master/Slave

Stand-alone authorization to transmit belongs exclusively to one station (master), while other stations (slaves) transmit only upon request.

Media Access Control

Layer two of the OSI model defines the mechanisms used to determine access to the communication channel.

Message

A packet of information that is delivered to and from a control comprised of bits and/or bytes.

Message Router Object

An element of a component that passes explicit messages to other objects.

NEMA

National Electrical Manufacturers Association.

Network

A system of computers and other devices interconnected by telephone wires or other means in order to share information.

NFXT

Near End Cross Talk – The level of unwanted signal transferred from the transmitting wires to the receiving wires measured on the transmitting end. The specification is in decibels and refers to the maximum amount of signal that will be ignored, meaning the higher the decibel rating the better the specification. The same specification measured on the receiving end is referred to as Far End Cross Talk (FEXT).

Nodes

Used to describe a single control or address and its supporting components.

Object

DeviceNet™ node that is modeled via software as a collection of objects. Objects provide an abstract replication of a particular component within a product.

Object Model

Provides a template for organizing and implementing attributes, services and behaviors of components of DeviceNetTM products.

Open Architecture/Network

A protocol that is available to and open to the public without purchase of a licensing agreement.

Open Style Connector

Approved connector style for DeviceNet™ where low-cost in panel connection to devices is required . It allows for the simple daisy-chaining of multiple devices.

Open Systems Interconnect (OSI) Model

The International Standards Organization definition of the 7 communication layers that must be supported in a device for it to share network services with similar and dissimilar devices.

Parameter Object

Used in devices with configurable parameters. One instance would be presented for each configurable parameter. The parameter object provides a standard way for a configuration tool to access all of the parameters; including values, ranges, text strings and limits.

PE (Cellular)

Expanded or foam polyethylene.

Peer-to-Peer

One control communicated directly with another control.

Physical Layer

Layer consisting of sensors, actuators, cables and other control devices.

PLC

Programmable Logic Controller.

Profibus DP

A polling Profibus network, whereby the assigned master requests the status of each node.

Profibus FMS

A Profibus network which supports both peer-to-peer and master-to-master messaging format.

Profibus PA

A Profibus network that provides both data and power over the same two wires in accordance with IEC 1158-2. Typically used in intrinsically safe applications.

Protocol

Language and logic utilized in software to address a control for communications between two devices or processes.

POLV

Polyvinyl Chloride. A general purpose thermoplastic widely used in wire/cable jacketing.

Real Time

The immediate performance of an activity/command.

Response Time

Time necessary to receive a response or trigger an activity from PLC to the control

RJ-11

A 4- or 6-pin modular connector used with twisted pair cable primarily in telephony applications, but also applicable in some datacom applications.

RJ-45

An 8-pin modular connector used with twisted pair cable in datacom or datacom/telephony applications

Round Media

Two twisted pair wires (24VDC power and signal) plus drain in one cable per DeviceNet™ standards.

SAB

Sensor/Actuator Bus – Integration of several sensors and actuators on one cable.

Sealed style of connector

Molded quick-connect/disconnect style of connectors approved for DeviceNet™ installations which allow network devices to be simply added or replaced. Used when devices are exposed to a factory environment and reduced installation time and elimination of miss-wirings are critically important considerations.

Shiold

A metallic layer applied over a group of wires to prevent interference between the enclosed wires and external fields or noise.

Smart Sensors

Sensors that have an ASIC embedded directly in/on the control.

Star Topology

A communication network based upon individual nodes connected to a central hub device that receives and directs all transmissions. (See Topology).

STP

Shielded Twisted Pair – a wire used in certain SAB applications.

Switching Hub

A device that interconnects network segments at the data link layer.

TIA 568A/B

Standard 8-pin wiring sequences which defines the position of the individual transmit and receive pairs and the color code used for each wire.

ΓΙΑ/ΕΙΑ

Telecommunications Industry Association/Electronic Industry Association – A standards organization which sets guidelines for structured cabling systems used in commercial premises.

Topology

The arrangement in which the nodes of a LAN are connected to each other.

Transceive

The component in the node that is responsible for the interface to the network.

Trunk Cable

Also known as Bus Cable, it is the main or power and communications cable.

UL

Underwriter's Laboratories.

UTP

Unshielded Twisted Pair - wire used in certain SAB applications.

Velocity of Propagation

A function of the dielectric constant, expressed as a percent of transmission speed of a signal down the wire as compared to free space.

VW-1

Vertical wire flame test rating.

approvalcodesand applicable protection sandards

Protection Bas

- Protection against solid bodies larger than 1mm. No liquid protection defined.
- **B** Dust tight. Protection against water spray from all directions at 43 PSI through a 12mm nozzle.
- **B** Dust tight. Protection against the effects of immersion in water for 30 minutes at a depth of 1 meter.
- **B** Dust tight. Protection against the effects of indefinite immersion in water at a pressure specified by the manufacturer. The manufacturer's specifications must be known if a valid comparison is to be made.

NationalEctrical6de - Although the NEC covers wire and cable installed in factories, office buildings, etc as well all cable which pass through any floor, wall ceiling or which travel in ducts, plenums and other air handling spaces, each individual municipality, city, county or state can decide whether or not they wish to adopt the NEC as governing law.

NANationalFre Potection Sciation)

NENational Ectrical Munacturers Aciation)

Defines the degree of protection in the actual test specifications.

- NMI Enclosures are intended for use primarily to provide a degree of protection against limited amounts of falling dirt.
- **N** Enclosures are intended for outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet and external ice formation.
- **NM** Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, sleet, splashing water, hosedown and external ice formation.
- **NE** Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during occasional temporary submersion at a limited depth.
- **NES** Enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against the entry of water during prolonged submersion at a limited depth.

Land U SI

Designated Underwriters Laboratories "UL Listed" and "UL Recognized", respectively. UL is a nationally recognized laboratory that tests many products to meet safety standards that are defined in their own and other industry specifications.

DE00

Defines the minimum creepage distances of the equipment to prevent hazardous electrical current and voltage for persons and objects. Isolation Class C includes the equipment mainly designed for industrial and agricultural applications in warehouses without heating, in workshops or machine tools.

₩

A flammability rating established by Underwriters Laboratories for wires and cables that pass a specially designed vertical flame test.

IP Ratings Table - Definition

FIRST INDEX FIGURE SECOND INDEX FIGURE CODE LETTER (INTERNATIONAL PROTECTION) (FOREIGN BODIES PROTECTION) (WATER PROTECTION) INDEX FIGURE INDEX FIGURE DEGREE OF PROTECTION DEGREE OF PROTECTION No Protection against accidental contact, no No Protection O No protection No protection against water protection against foreign bodies Protection against con-Protection tact with any large area Protection against against large by hand and against Drip-Proof vertical water drips foreign bodies large solid bodies with Ø>50mm Protection Protection against contact with the fingers, against Protection against water protection against Drip-Proof medium sized drips (up to a 15° angle) small foreign solid foreign bodies with Øv>12mm bodies Protection against tools Protection wires, or similar objects with Ø>2.5mm protec-Protection against water against small Spray-proof drips (up to a 60° angle) solid foreign tion against small foreign solid bodies with Ø>2.5mm bodies Protection Protection against 4 against grain-As 3 however 0>1mm Spray-proof 4 shaped foreign splashed water from all directions bodies Full protection against Protection contact. Protection Protection against 5 against deposits against interior equip-Hose-proof splashed water (out of a 5 ment damage due to of dust nozzle) from all directions dust deposits Protection Total protection against Protected 6 Protection against against ingress contact. Protection against against penetration of 6 temporary flooding of dust flooding dust Protected Protected against against temporary immersion immersion 8 Protected against Water-tight water pressure

 \emptyset = diameter of foreign body

part nbrer - to - pag nbrer index

Đ vice N t	DND33A-Mxxx	DN600036	114011A-PM-3
DVIO CAL	DND39A-Mxxx	DN610038	115010A
DNAPT70	DND40-Mxxx	DN800036	115011A-PM-1
DNETAUXPT	DND41A-Mxxx	DN5000-Mxxx	115011A-PM-332
DNETAUXPT-PM-170	DND42A-Mxxx	DN5100-Mxxx	115032A
DNETAUXPT-PM-370	DND43A-Mxxx	DN5210A-Mxxx	115060A
DNETEXT-C16	DND49A-Mxxx	DN5290A-Mxxx	4R5F560005
DNESJ70	DND91A-Mxxx	DN5301A-Mxxx	4R5F570005
DNEST70	DND92A-Mxxx	DN5309A-Mxxx	4R5P00D12C305
DN-MTR	DND93A-Mxxx	DN91A-Mxxx	4R5P06D12C305
DN-MTR-BAG	DND400062	DN99A-Mxxx	405000D12Mxxx
DN-SPAUX	DND410062	MICT555	405001D12Mxxx
DN-SPNET32	DND420060	TBDDN-444N-88U	405006D12Mxxx
DNDC302A-Mxxx54	DND4300-02	TBDDN-444P-88U	405007D12Mxxx
DNDC303A-Mxxx54	DND4500-02	TBDDN-480N-80U	445030D12Mxxx
DNDC220A-Mxxx	DND5304-Mxxx	TBDDN-480P-80U	445031D12Mxxx
DNDC230A-Mxxx54	DND6000	TBDDN-880N-804	445032D12Mxxx
DNDC304-Mxxx	DND610062	TBDDN-880P-804	445033D12Mxxx
DNDF00A-M500	DND800062	TCDDN-8D0N-10U12	485030D12Mxxx
DNDF00A-T100	DND8200	TCDDN-8D0P-10U	485031D12Mxxx
DNDG00A-M500	DND8300-02	TCDDN-888N-11U	485032D12Mxxx
DNDG00A-T100	DND8500-02	TCDDN-888P-11U	485033D12Mxxx
DNYG001	DN-PT172	1A4000-34	67-0065
DNB00A-M500	DN-PT2	1A4006-34	67-007528
DNB00A-T100	DN-PT372	1A5000-34DN	8A4000-3268
DNE00A-M500	DN00A-M500	1A5006-34DN	8A4006-3268
DNE00A-T100	DN00A-T100	1R4000A20xxxx	8A5000-32DN
DNF00A-M500	DN01A-Mxxx	1R4000A39xxxx	8A5006-32DN
DNF00A-T100	DN09A-Mxxx	1R4006A20xxxx	8R4A00A18A12068
DND00A-M500	DN10A-Mxxx	1R4006A39xxx	8R4L3068
DND00A-T100	DN11A-Mxxx	1R4030	8R5L30
DND02A-Mxxx	DN19A-Mxxx	1R5030	8R5L510005-3558
DND03A-Mxxx	DN40-Mxxx	104000A01Mxxx	8R5L560005-3558
DND10040	DN90A-Mxxx	104000A38Mxxx	8R5L570005-3558
DND10140	DN91A-Mxxx	104001A01Mxxx	804000xxxMxxx
DND12A-Mxxx	DN100L	104001A38Mxxx	804001xxxMxxx 68
DND13A-Mxxx	DN10040	104006A01Mxxx	804006xxxMxxx
DND15040	DN150L	104006A38Mxxx	804007xxxMxxx
DND15140	DN15040	104007A01Mxxx	81611
DND20A-Mxxx	DN210038	104007A38Mxxx	81612
DND21A-Mxxx	DN302030	114030A01Mxxx	845030D12Mxxx
DND22A-Mxxx	DN3020CAP30	114030A38Mxxx	845031D12Mxxx
DND23A-Mxxx	DN3020PM-132	114031A01Mxxx	845032D12Mxxx
DND29A-Mxxx	DN3020PM-332	114031A38Mxxx	845033D12Mxxx
DND30A-Mxxx	DN3030-PT-1	114032A01Mxxx	884030xxxMxxx
DND302030	DN320030	114032A38Mxxx	884031xxxMxxx
DND31A-Mxxx	DN400036	114033A01Mxxx	884032xxxMxxx
DND32A-Mxxx	DN410038	114033A38Mxxx	884033xxxMxxx

Pofosi	MM3G72PP4Mxxx	115032A01Mxxx	FDW/A ALI2000C0E0 124
POIDS	MM3S60PP4Mxxx	115033A01Mxxx	ERWAAU3000C050 136 ERWAAU7000C050
DAECOO 22 104	MM3S62PP4Mxxx	51209-030	ERWD2J30136
BA5S00-32	MM3S63PP4Mxxx	8A5000-32	ERWD2U30
		8A5000-32110	
BM5G30PP4Mxxx90	MP3G62PP4Mxxx94		ERWD2U70
BM5G31PP4Mxxx90	MP3G63PP4Mxxx94	8R5A00A18A120110	ERWF2U70
BM5G32PP4Mxx90	MP3G72PP4Mxxx94	8R5L30110	ERWPAU7003M006 136
BM5G33PP4Mxxx90	MP3S62PP4Mxxx	805000xxxMxxx	ER1PADAPTER
BM5G60PP4Mxxx90	MP3S63PP4Mxxx	805001xxxMxxx	ER1PADAPTER90136
BM5G61PP4Mxxx90	M03S06PP4Mxxx	805006xxxMxxx	EWWA06003Mxxx134
BM5G62PP4Mxxx90	M03S07PP4Mxxx	805007xxxMxxx	EWWA06010Mxxx134
BM5G63PP4Mxxx90	PA9D0B-42106	81688-030	EWWA06015Mxxx134
BM5G70PP4Mxxx90	PA9D01-42106	81689-030100	EWWA06203Mxxx134
BM5G72PP4Mxxx90	PA9S01-42106	85-000185	EWWA06210Mxxx134
BM5S30PP4Mxxx	PBAPT114	885030xxxMxxx	EWWA06215Mxxx134
BM5S31PP4Mxxx	PDTS01102	885031xxxMxxx	EWWA06303Mxxx134
BM5S32PP4Mxxx	P03S07PP4Mxxx96	885032xxxMxxx	EWWA06310Mxxx134
BM5S33PP4Mxxx	TBDPB-408P-B8U	885033xxxMxxx	EWWA06315Mxxx134
BM5S60PP4Mxxx	TBDPB-444N-B8U82		E1AS00-52138
BM5S61PP4Mxxx	TBDPB-444P-B8U	hdstrial Eernet	E1AS06-52138
BM5S62PP4Mxxx	TBDPB-462N-B8U82		E1WB03003M002 134
BM5S63PP4Mxxx	TBDPB-462P-B8U	DRL-EDS-OPC-BSC 140	E1WB03015M002 134
BP5G32PP4Mxxx90	TBDPB-480N-B8U82	DRL-EDS-OPC-ENT	E1WB03010M002 134
BP5G33PP4Mxxx90	TBDPB-480P-B8U	DRL-EDS-OPC-EXP	E10A00603Mxxx
BP5G62PP4Mxxx90	TBDPB-808P-B84	DRL-002140	E10A00610Mxxx
BP5G63PP4Mxxx90	TBDPB-844N-B8482	DRL-111-xxx140	E10A00615Mxxx
BP5G72PP4Mxxx90	TBDPB-844P-B84	DRL-241-xxx140	E10A00703Mxxx
BP5S32PP4Mxxx92	TBDPB-862N-B8482	DRL-250140	E10A00710Mxxx
BP5S33PP4Mxxx92	TBDPB-862P-B84	DRL-280140	E10A00715Mxxx
BP5S62PP4Mxxx92	TBDPB-880N-B8482	DRL-281-xxx140	E11A06003Mxxx
BP5S63PP4Mxxx92	TBDPB-880P-B84	DRL-290140	E11A06010Mxxx
BR5L30100	TCDPB-8B4N-B1U80	DRL-332-xxx140	E11A06015Mxxx
BR5U70PP4Mxxx3 98	TCDPB-8B4P-B1U80	DRL-350140	E11A06015MxxxD 132
BR5U76PP4Mxxx3 98	TCDPB-8C2N-B1U80	DRL-362-xxx140	E11A06203Mxxx
B05S06107	TCDPB-8C2P-B1U80	DRL-380140	E11A06210Mxxx
B05S00PP4Mxxx86	TCDPB-8D0N-B1U80	ENDR2FB5	E11A06215Mxxx
B05S01PP4Mxxx86	TCDPB-8D0P-B1U80	ENHSAURR8139	E11A06303Mxxx
B05S06PP4Mxxx86	TCDPB-888N-B1U80	ENPR1FF5125	E11A06310Mxxx
B05S07PP4Mxxx86	TCDPB-888P-B1U80	ENSP1F5127	E11A06315Mxxx
MA9DP0-32106	1R5000A20Axxx	ENSP1F5C305127	E11A06315MxxxD
MA9D00-32106	1R5006A20Axxx	ENSP6F5127	E16A03003Mxxx
MA9D00-42106	105000A01Mxxx	ENSR1FB5126	E11B03003M002132
MM3G60PP4Mxxx 94	105001A01Mxxx	ENSR1FB5C305	E11B03010M002132
MM3G61PP4Mxxx 94	105006A01Mxxx	ENSR2FB5C305	E11B03015M002132
MM3G62PP4Mxxx	105007A01Mxxx	ENSR3FB5C305	E66E06003Mxxx132
MM3G63PP4Mxxx	115030A01Mxxx	ENS1115Mxxx122	TEN-888-R18-05120
MM3G70PP4Mxxx	115031A01Mxxx	ERWAAJ3000C050136	104000A01Mxxx