

IMPORTANT NOTICE: Robert Bosch LLC and the manufacturers whose vehicles are accessible using the CDR System urge end users to use the latest production release of the Crash Data Retrieval system software when viewing, printing or exporting any retrieved data from within the CDR program. Using the latest version of the CDR software is the best way to ensure that retrieved data has been translated using the most current information provided by the manufacturers of the vehicles supported by this product.

CDR File Information

User Entered VIN/Frame Number	██████████
User	mfk
Case Number	3/2015
EDR Data Imaging Date	09/11/2015
Crash Date	02/09/2015
Filename	SB1ZS3JE60E069800_ACM.CDRX
Saved on	Friday, September 11 2015 at 13:54:09
Collected with CDR version	Crash Data Retrieval Tool 16.1.1
Reported with CDR version	Crash Data Retrieval Tool 16.1.1
EDR Device Type	Airbag Control Module
Event(s) recovered	Front/Rear (1), Side (1)

Comments

No comments entered.

Data Limitations

CDR Record Information:

- Due to limitations of the data recorded by the airbag ECU, such as the resolution, data range, sampling interval, time period of the recording, and the items recorded, the information provided by this data may not be sufficient to capture the entire crash.
- Pre-Crash data is recorded in discrete intervals. Due to different refresh rates within the vehicle's electronics, the data recorded may not be synchronous to each other.
- Airbag ECU data should be used in conjunction with other physical evidence obtained from the vehicle and the surrounding circumstances.
- If any of the front passenger seat airbags, side airbags, or Curtain Shield Airbags have deployed, data will not be overwritten or deleted by the airbag ECU following that event. If none of the airbags have deployed, the data of that event may be overwritten by a following event even if other airbags (pretensioner, rear seat airbag, etc.) have deployed.
- If power supply to the airbag ECU is lost during an event, all or part of the data may not be recorded.
- "Diagnostic Trouble Codes" are information about faults when a recording trigger is established. Various diagnostic trouble codes could be set and recorded due to component or system damage during an accident.
- The airbag ECU records only diagnostic information related to the airbag system. It does not record diagnostic information related to other vehicle systems.
- The TaSCAN, Global TechStream, or Intelligent Tester II devices (or any other Toyota genuine diagnostic tool) can be used to obtain detailed information on the diagnostic trouble codes from the airbag system, as well as diagnostic information from other systems. However, in some cases, the diagnostic trouble codes of the airbag system recorded by the airbag ECU when the event occurred may not match the diagnostic trouble codes read out when the diagnostic tool is used.

General Information:

- The data recording specifications of Toyota's airbag ECUs are divided into the following seven categories. The specifications for 12EDR or later are designed to be compatible with NHTSA's 49CFR Part 563 rule.
 - 00EDR / 02EDR / 04EDR / 06EDR / 10EDR / 12EDR / 13EDR
- The airbag ECU records data for all or some of the following accident types: frontal crash, rear crash, side crash, and rollover events. Depending on the installed airbag ECU, data for side crash and/or rollover events may not be recorded.
- This airbag ECU records pre-crash data and post-crash data.
 - If a single event occurs independently, the data for that event is recorded on a one-to-one basis.
 - If multiple events occur successively (within a period of approximately 500ms), the establishment of the recording trigger for the first event is defined as the "pre-crash recording trigger". Pre-crash data for the first event and post-crash data for each successive event is then recorded.
- The airbag ECU has two recording pages (memory maps) to store pre-crash data. Additionally, to store post-crash data, the airbag ECU has two recording pages for each accident type: two pages for frontal and rear crash, two pages for a side crash, and two pages for rollover event.
- The data recorded by the airbag ECU includes correlating information between each previously occurring event (i.e., information that clarifies the collision event sequence. This correlation information consists of the following items.
 - Time from Previous Pre-Crash TRG
 - Linked Pre-Crash Page
 - Time from Pre-Crash TRG
 - TRG Count
 - Previous Crash Type

- In frontal and rear collision events, the first point where a longitudinal cumulative delta-V of over 0.8 km/h (0.5 mph) is reached is regarded as time zero for the recorded data. In side impact collision and rollover events, the point in time at which the recording trigger is established is regarded as time zero for the recorded data.
- The recording trigger judgment threshold value differs depending on the collision type (i.e., frontal crash, rear crash, side crash, or rollover event).
- Some of the data recorded by the airbag ECU is transmitted to the airbag ECU from various vehicle control modules by the vehicle's Controller Area Network (CAN).
- In some cases, the airbag ECU part number printed on the ECU label may not match the airbag ECU part number that the CDR tool reports. The part number retrieved by the CDR tool should be considered as the official ECU part number.
- In frontal and rear collision events, the record time varies depending on the period during which a longitudinal cumulative delta-V of over 0.8 km/h (0.5 mph) is reached, and time series data is recorded for up to 250 ms. The record time described above is indicated as "Length of Delta-V". "Delta-V, Longitudinal" outside the record time is indicated by area shaded in the table, and not indicated in the graph.

Data Element Sign Convention:

The following table provides an explanation of the sign notation for data elements that may be included in this CDR report.

Data Element Name	Positive Sign Notation Indicates
Maximum Delta-V, Longitudinal	Forward
Delta-V, Longitudinal	Forward
Maximum Delta-V Lateral, Side Satellite Sensor 1	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 2	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 3	Left to Right
Maximum Delta-V Lateral, Side Satellite Sensor 4	Left to Right
Delta-V Lateral, Side Satellite Sensor 1	Left to Right
Delta-V Lateral, Side Satellite Sensor 2	Left to Right
Delta-V Lateral, Side Satellite Sensor 3	Left to Right
Delta-V Lateral, Side Satellite Sensor 4	Left to Right
Roll Angle Peak	Clockwise Rotation
Roll Angle at the Time of TRG	Clockwise Rotation
Roll Rate	Clockwise Rotation
Lateral Acceleration , Airbag ECU Sensor *	Left to Right
Longitudinal Acceleration , VSC Sensor	Forward
Yaw Rate	Left Turn
Steering Input	Left Turn

* For sensing a rollover

1) Data Definitions:

- 2)
- The "ON" setting for the "Freeze Signal" indicates a state in which the non-volatile memory can not be overwritten or deleted by the airbag ECU. After "Freeze Signal" has been turned ON, subsequent events will not be recorded.
 - "Recording Status" indicates a state in which all recorded event data has been written into the non-volatile memory, or a state in which this process was interrupted and not fully written into the non-volatile memory. If "Recording Status" is "Incomplete", recorded event data may not be valid.
 - If the "Occupant Size Classification, Front Passenger" displays "Child" or "Not Occupied", "Side Air Bag Deployment, Time to Deploy" and "Pretensioner Deployment, Time to Fire" may indicate a time even if deployment did not occur on the for following part no's:
- 89170-07280, 35400, 35410, 35470, 42660, 0R120, 0R080, 0R081, 0R150
 - "Engine RPM" indicates the number of engine revolutions, not the number of motor revolutions. The recorded value has an upper limit of 12,800 rpm. Resolution is 100 rpm and the value is rounded down and recorded. For example, if the actual engine speed is 799 rpm, the recorded value will be 700 rpm.
 - If the electric vehicle is using a calculated/virtual engine RPM for drivetrain control, "Engine RPM" may be recorded, but should not be used during data analysis.
 - The upper limit for the recorded "Vehicle Speed" value is 200 km/h (125mph). Resolution is 1km/h (0.6mph) and the value is rounded down and recorded. The accuracy of the "Vehicle Speed" value can be affected by various factors. These include, but not limited, to the following.
- Significant changes in the tire's rolling radius
- Wheel lock and wheel slip
 - "Accelerator Pedal" has two recording specifications. Both the recorded value increases as the driver depresses the accelerator.
- Percentage of accelerator pedal depressed (recorded as 0-100(%)).
- Output voltage of accelerator pedal module (recorded as 0-5(V)).
 - If M/T transmission vehicle of some limited model, "Shift Position" may display "Drive" regardless of the actual shift position.
 - Depending on the type of occupant sensor installed in the vehicle, one of the following three recording formats for "Occupant Size Classification, Front Passenger" will be utilized.
- Occupied / Not Occupied
- AM50 / AF05 / Child / Not Occupied
- AM50 / AF05 / Child or Not Occupied
 - "Cruise Control Status" indicates whether the cruise control system is actuated or not. OFF indicates that the cruise control system is not actuated, but can also indicates that the vehicle is not equipped with the system.
 - "Air Bag Warning Lamp, On/Off", "Ignition Cycle, Crash", "Seat Track Position Switch, Foremost, Status, Driver", "Occupant Size Classification, Front Passenger", "Safety Belt Status, Driver", "Safety Belt Status, Front Passenger", "Frontal Air Bag Suppression Switch

Status, Front Passenger", and "RSCA Disable Switch" indicate the state approximately 1 second before time zero. They may not always indicate the state at the moment of collision.

- The upper and lower limits for the recorded value of "Motor RPM" is 17,500 rpm and -7,500 rpm respectively. Resolution is 100 rpm and the value is rounded down and recorded.
- "Brake Oil Pressure" has an upper limit of 12.14 Mpa. In the case of the vehicle that has not VSC system, "0 Mpa" or "Invalid" may be displayed.
- "Longitudinal Acceleration , VSC Sensor" has upper and lower limits for the recorded value of 8.973 m/s² and -8.973 m/s² respectively. This acceleration sensor does not sense collisions.
- "Sequential Shift Range" displaying "Undetermined" indicates the shift range is undetermined or was not being used.
- Some vehicles will not be equipped with all "Drive Mode" types indicated in the "Drive Mode" table. If some or all drive modes are not applicable to vehicle, "OFF" or "Invalid" may be displayed. The item in the "Drive Mode" table may not match the name of switch or indicator that equipped the vehicle.
- The upper and lower limits for the recorded value of "Steering Input" is 375 deg and -375 deg respectively. Resolution is 3 deg and the value is rounded down and recorded.
- Resolution of the "Air Bag Warning Lamp ON Time Since DTC was Set" is 15 minutes, and the value is rounded down and recorded.
- "Delta-V, Longitudinal" indicates the change in forward speed after time zero. This does not refer to vehicle speed, and it does not include the change in speed during the period from the start of the actual collision to establishment of the time zero.
- "Location of Side Satellite Sensor" shows the outline of a typical sensor position. Sensory location can be confirmed using the repair manual.
- For "Lateral Delta-V", the acceleration sensor installed in the airbag ECU is not used but the satellite sensor is used for the "Lateral Delta-V" calculation.
- "Time from Previous Pre-Crash TRG" indicates the time between the establishment of an event's pre-crash recording trigger to the establishment of a more recent event's pre-crash recording trigger. The upper limit for the recorded value is 16,381 milliseconds. In the event of establishment of the first pre-crash recording trigger after the ignition is switched ON, the upper limit value(max value) is recorded.
- "TRG Count" indicates a calculated value of the number of times recording triggers have been established for all crash types. The sequence in which each event occurred can be verified from the "TRG Count". The smaller the "TRG Count" value, the older the data. The upper limit for the recorded value is 65,533 times. When more than one event reaches the upper limit, the actual "TRG Count" may be greater than what is displayed for that event.
- "Linked Pre-Crash Page" is used to link 'paged" pre-crash data with 'paged" post-crash data. When old pre-crash data is overwritten by new pre-crash data, the "Linked Pre-Crash Page" value may record a page number that is not actually linked.
- Resolution of the "Time from Pre-Crash to TRG" is 50 [ms], and the value is rounded up and recorded.
- "Roll Angle at the Time of TRG" and "Roll Angle Peak" do not represent the actual roll angle of the vehicle. These values are used internally by the airbag ECU for sensing a rollover.

05012_ToyotaS02std_r024

System Status at Time of Retrieval

ECU Part Number	89170-02C30
EDR Generation	12EDR
Complete File Recorded	Yes
Freeze Signal	ON
Freeze Signal Factor	Front Airbag Deployment
Diagnostic Trouble Codes Exist	No
Ignition Cycle ,Download (times)	8181
Multi-event, number of events (times)	2 or greater
Time from event 1 to 2 (s)	0.005
Time from Previous Pre Crash TRG (msec)	16381 or greater
Latest Pre-Crash Page	0
Contains Unlinked Pre-Crash Data	No

Event Record Summary at Retrieval

Events Recorded	TRG Count	Crash Type	Time (msec)	Pre-Crash & DTC Data Recording Status	Event & Crash Pulse Data Recording Status
Most Recent Event	2	Front/Rear Crash	0	Complete (Page 0)	Complete (Front/Rear Page 0)
1st Prior Event	1	Side Crash	-5	Complete (Page 0)	Complete (Side Page 0)

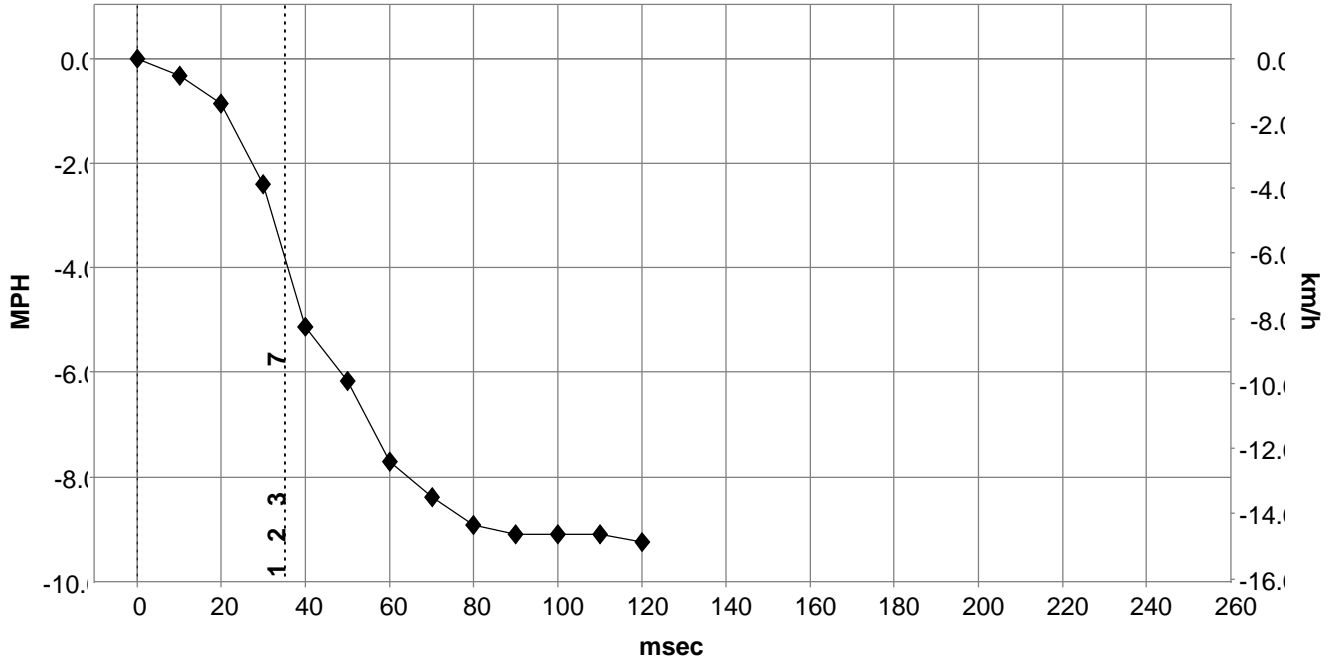
System Status at Event (Most Recent Event, TRG 2)

Recording Status, Front/Rear Crash Info.	Complete
Crash Type	Front/Rear Crash
TRG Count (times)	2
Previous Crash Type	Side Crash
Time from Pre-Crash TRG (msec)	40
Linked Pre-Crash Page	0
Frontal Airbag Deployment, Time to 1st Stage Deployment, Driver (msec)	35
Frontal Airbag Deployment, Time to 1st Stage Deployment, Front Passenger (msec)	35
Pretensioner Deployment, Time to Fire, Driver (msec)	35
Pretensioner Deployment, Time to Fire, Front Passenger (msec)	35
Frontal Airbag Deployment, Time to 2nd Stage, Driver (msec)	SNA
Frontal Airbag Deployment, Time to 2nd Stage, Front Passenger (msec)	SNA
Active Head Restraint, Time to Deploy, Driver (msec)	SNA
Active Head Restraint, Time to Deploy, Front Passenger (msec)	SNA
Side Curtain Airbag Deployment, Time to Deploy, Driver (msec)	35
Side Curtain Airbag Deployment, Time to Deploy, Passenger (msec)	35
Rear Window Airbag Deployment, Time to Deploy (msec)	SNA

Longitudinal Crash Pulse (Most Recent Event, TRG 2 - table 1 of 2)

Recording Status, Time Series Data	Complete
Time from Time Zero to TRG (msec)	34.5
Length of Delta-V (msec)	120
Max. Longitudinal Delta-V (MPH [km/h])	-9.4 [-15.2]
Time, Maximum Delta-V, Longitudinal (msec)	126.5
Power Supply Status at Max. Delta-V	ON

Longitudinal Delta-V



Deployment Time Marker Key

1	Driver Airbag Deployment Time
2	Passenger Airbag Deployment Time
3	Driver/Passenger Pretensioner
4	Driver 2nd Stage Airbag Deployment Time
5	Passenger 2nd Stage Airbag Deployment
6	Driver/Passenger AHR
7	Driver/Passenger CSA
8	Rear Window Airbag Deployment Time

Longitudinal Crash Pulse (Most Recent Event, TRG 2 - table 2 of 2)

Time (msec)	Longitudinal Delta-V (MPH [km/h])	Power Supply Status
0	0.0 [0.0]	ON
10	-0.3 [-0.6]	ON
20	-0.9 [-1.4]	ON
30	-2.4 [-3.9]	ON
40	-5.1 [-8.3]	ON
50	-6.2 [-9.9]	ON
60	-7.7 [-12.4]	ON
70	-8.4 [-13.5]	ON
80	-8.9 [-14.3]	ON
90	-9.1 [-14.6]	ON
100	-9.1 [-14.6]	ON
110	-9.1 [-14.6]	ON
120	-9.3 [-14.9]	ON
130	0.0 [0.0]	ON
140	0.0 [0.0]	ON
150	0.0 [0.0]	ON
160	0.0 [0.0]	ON
170	0.0 [0.0]	ON
180	0.0 [0.0]	ON
190	0.0 [0.0]	ON
200	0.0 [0.0]	ON
210	0.0 [0.0]	ON
220	0.0 [0.0]	ON
230	0.0 [0.0]	ON
240	0.0 [0.0]	ON
250	0.0 [0.0]	ON

DTCs Present at Time of Event (Most Recent Event, TRG 2)

Recording Status, Diagnostic	Complete
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

Pre-Crash Data, 1 Sample (Most Recent Event, TRG 2)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	400
Safety Belt Status, Driver	SNA
Safety Belt Status, Front Passenger	SNA
Occupant Size Classification, Front Passenger	SNA
Frontal Airbag Suppression Switch Status, Front Passenger	OFF (enable)
RSCA Disable Switch	SNA
Seat Track Position Switch, Foremost, Status, Driver	SNA
Airbag Warning Lamp, On/Off	OFF
Ignition Cycle ,Crash (times)	8175

Pre-Crash Data, -5 to 0 seconds (Most Recent Event, TRG 2)

Time (sec)	-4.9	-4.4	-3.9	-3.4	-2.9	-2.4	-1.9	-1.4	-0.9	-0.4	0 (TRG)
Vehicle Speed (MPH [km/h])	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.3 [60]	37.9 [61]	37.3 [60]
Accelerator Pedal, % Full (%)	16.0	23.0	23.5	23.5	22.5	20.0	20.0	20.5	21.5	25.0	73.5
Percentage of Engine Throttle	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Engine RPM (RPM)	900	500	100	500	1,000	900	1,000	1,000	1,000	1,100	1,200
Motor RPM (RPM)	4,600	4,600	4,600	4,600	4,600	4,500	4,500	4,500	4,500	4,500	4,500
Service Brake, ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Brake Oil Pressure (Mpa)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longitudinal Acceleration ,	-0.144	-0.502	-0.215	0.072	-0.072	-0.359	-0.072	-0.359	-0.144	0.718	-1.651
Yaw Rate (deg/sec)	-3.90	-4.88	-4.88	-4.39	-3.90	-2.93	-2.44	-3.42	-0.98	-0.49	-10.74
Steering Input (degrees)	-9	-12	-12	-12	-9	-6	-6	-6	0	0	-27
Shift Position	D	D	D	D	D	D	D	D	D	D	D
Sequential Shift Range	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined
Cruise Control Status	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, PWR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, ECO	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, Sport	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, Snow	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, EV	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

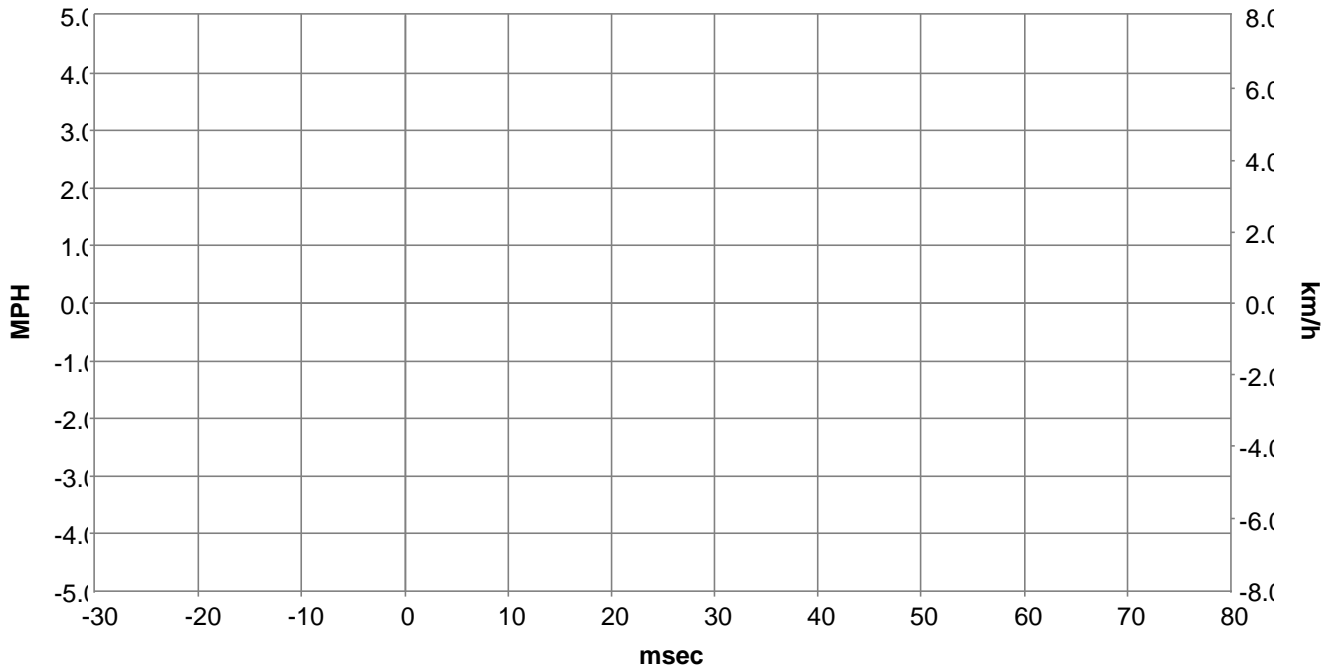
System Status at Event (1st Prior Event, TRG 1)

Recording Status, Side Crash Info.	Complete
Crash Type	Side Crash
TRG Count (times)	1
Previous Crash Type	No Event
Time from Pre-Crash TRG (msec)	0
Linked Pre-Crash Page	0
Side Airbag Deployment, Time to Deploy (If Equipped) (msec)	No
Side Curtain Airbag Deployment, Time to Deploy (If Equipped) (msec)	No
Pretensioner Deployment, Time to Fire (msec)	No
Rear Window Airbag Deployment, Time to Deploy (msec)	SNA

Lateral Crash Pulse (1st Prior Event, TRG 1 - table 1 of 2)

Recording Status, Time Series Data	Complete
Recorded Side	Left Side
Time from TRG to Next Sample (msec)	3
Location of Side Satellite Sensor 1	Not Equipped
Location of Side Satellite Sensor 2	B-Pillar
Location of Side Satellite Sensor 3	Not Equipped
Location of Side Satellite Sensor 4	C-Pillar
Maximum Delta-V Lateral, Side Satellite Sensor 1 (MPH [km/h])	N/A
Maximum Delta-V Lateral, Side Satellite Sensor 2 (MPH [km/h])	8.5 [13.7]
Maximum Delta-V Lateral, Side Satellite Sensor 3 (MPH [km/h])	N/A
Maximum Delta-V Lateral, Side Satellite Sensor 4 (MPH [km/h])	7 [11.3]

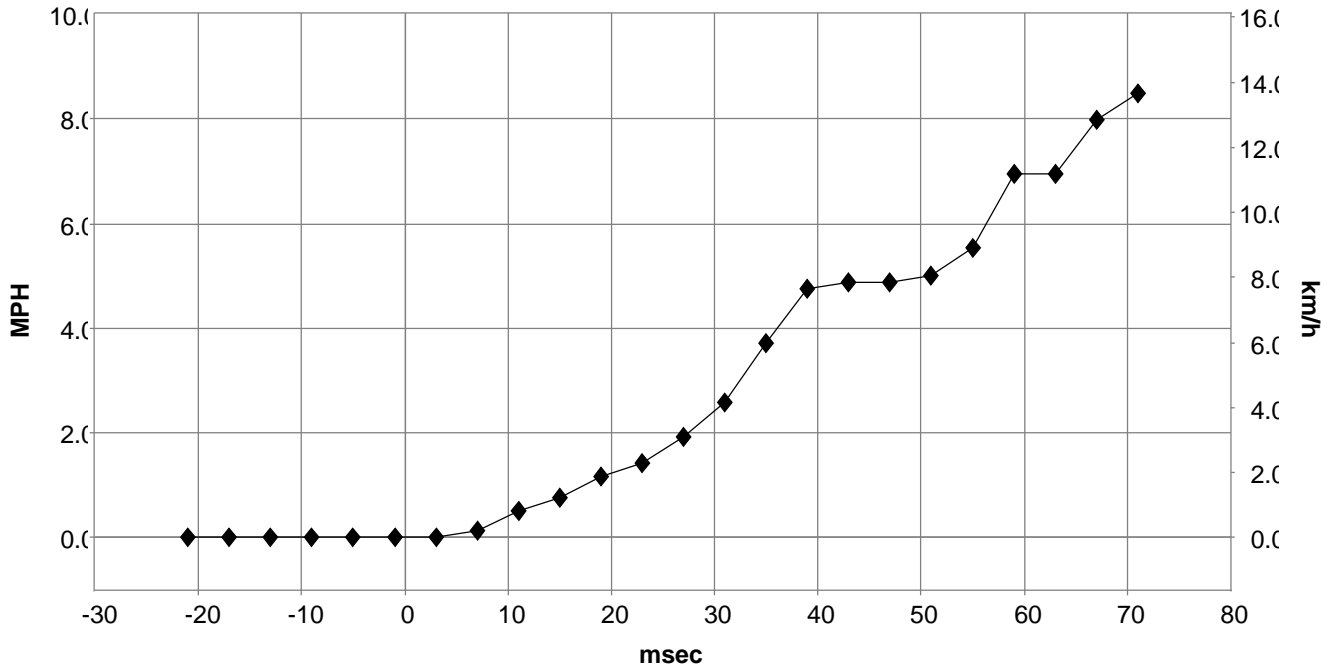
Side Satellite Sensor 1



Deployment Time Marker Key

1	Driver/Passenger Pretensioner
2	Side Airbag
3	Rear Window Airbag Deployment Time

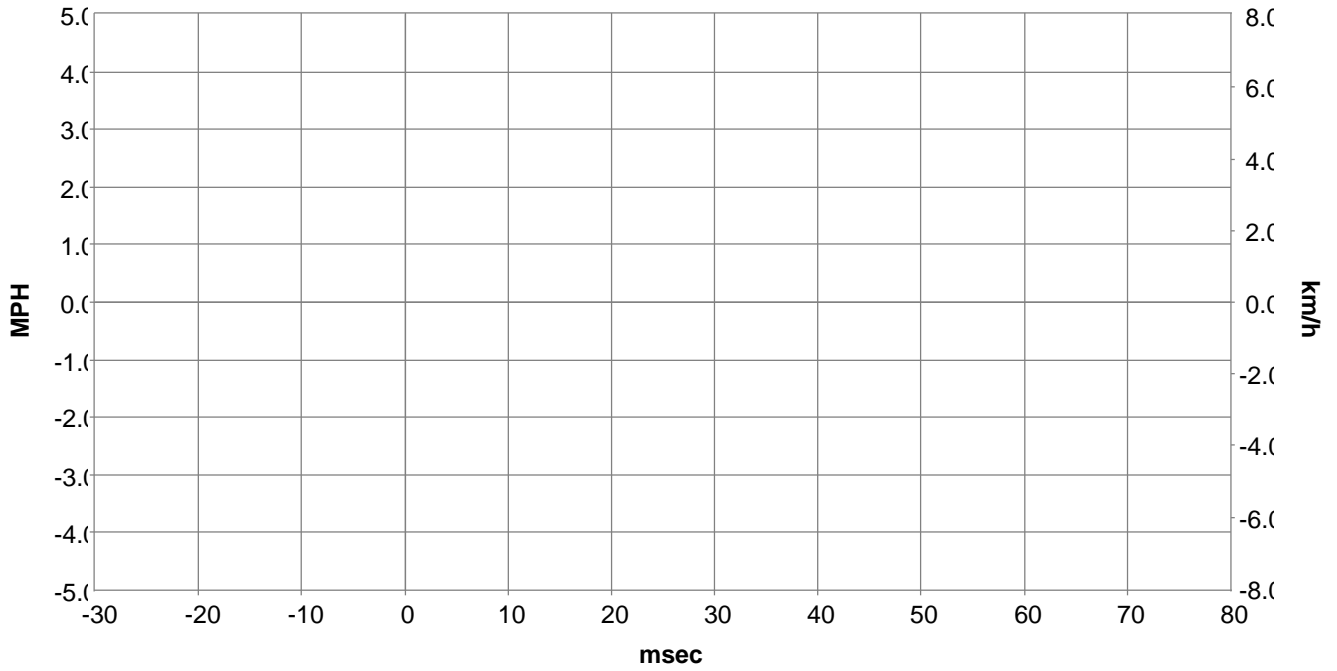
Side Satellite Sensor 2



Deployment Time Marker Key

1	Driver/Passenger Pretensioner
2	Side Airbag
3	Rear Window Airbag Deployment Time

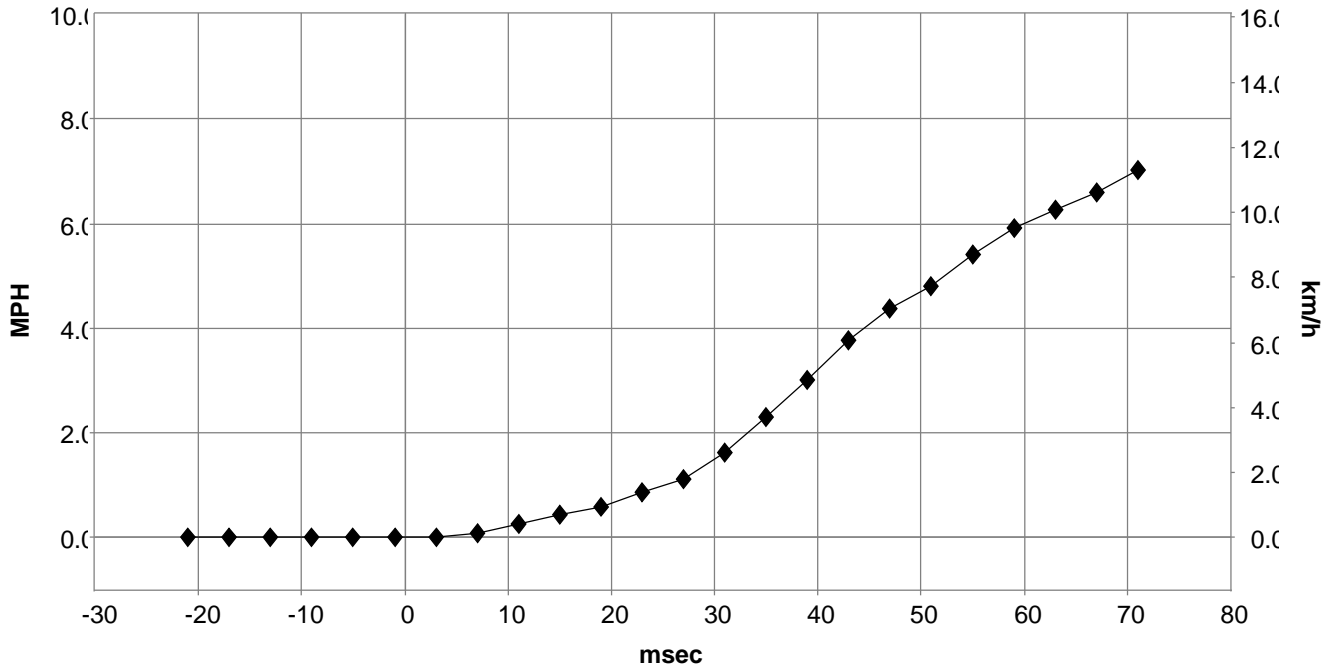
Side Satellite Sensor 3



Deployment Time Marker Key

1	Side Curtain Airbag
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Side Satellite Sensor 4



Deployment Time Marker Key

1	Side Curtain Airbag
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Lateral Crash Pulse (1st Prior Event, TRG 1 - table 2 of 2)

Time (msec)	Delta-V Lateral, Side Satellite Sensor 1 (MPH [km/h])	Delta-V Lateral, Side Satellite Sensor 2 (MPH [km/h])	Delta-V Lateral, Side Satellite Sensor 3 (MPH [km/h])	Delta-V Lateral, Side Satellite Sensor 4 (MPH [km/h])
-21	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
-17	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
-13	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
-9	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
-5	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
-1	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
3	SNA [SNA]	0.0 [0.0]	SNA [SNA]	0.0 [0.0]
7	SNA [SNA]	0.1 [0.2]	SNA [SNA]	0.1 [0.1]
11	SNA [SNA]	0.5 [0.8]	SNA [SNA]	0.3 [0.4]
15	SNA [SNA]	0.8 [1.2]	SNA [SNA]	0.4 [0.7]
19	SNA [SNA]	1.2 [1.9]	SNA [SNA]	0.6 [1.0]
23	SNA [SNA]	1.4 [2.3]	SNA [SNA]	0.9 [1.4]
27	SNA [SNA]	1.9 [3.1]	SNA [SNA]	1.1 [1.8]
31	SNA [SNA]	2.6 [4.1]	SNA [SNA]	1.6 [2.6]
35	SNA [SNA]	3.7 [6.0]	SNA [SNA]	2.3 [3.7]
39	SNA [SNA]	4.8 [7.7]	SNA [SNA]	3.0 [4.8]
43	SNA [SNA]	4.9 [7.9]	SNA [SNA]	3.8 [6.1]
47	SNA [SNA]	4.9 [7.9]	SNA [SNA]	4.4 [7.0]
51	SNA [SNA]	5.0 [8.1]	SNA [SNA]	4.8 [7.7]
55	SNA [SNA]	5.5 [8.9]	SNA [SNA]	5.4 [8.7]
59	SNA [SNA]	6.9 [11.2]	SNA [SNA]	5.9 [9.5]
63	SNA [SNA]	6.9 [11.2]	SNA [SNA]	6.3 [10.1]
67	SNA [SNA]	8.0 [12.8]	SNA [SNA]	6.6 [10.6]
71	SNA [SNA]	8.5 [13.7]	SNA [SNA]	7.0 [11.3]

DTCs Present at Time of Event (1st Prior Event, TRG 1)

Recording Status, Diagnostic	Complete
Ignition Cycle Since DTC was Set (times)	0
Airbag Warning Lamp ON Time Since DTC was Set (min)	0
Diagnostic Trouble Codes	None

Pre-Crash Data, 1 Sample (1st Prior Event, TRG 1)

Recording Status, Pre-Crash/Occupant	Complete
Time from Pre-Crash to TRG (msec)	400
Safety Belt Status, Driver	SNA
Safety Belt Status, Front Passenger	SNA
Occupant Size Classification, Front Passenger	SNA
Frontal Airbag Suppression Switch Status, Front Passenger	OFF (enable)
RSCA Disable Switch	SNA
Seat Track Position Switch, Foremost, Status, Driver	SNA
Airbag Warning Lamp, On/Off	OFF
Ignition Cycle ,Crash (times)	8175

Pre-Crash Data, -5 to 0 seconds (1st Prior Event, TRG 1)

Time (sec)	-4.9	-4.4	-3.9	-3.4	-2.9	-2.4	-1.9	-1.4	-0.9	-0.4	0 (TRG)
Vehicle Speed (MPH [km/h])	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.9 [61]	37.3 [60]	37.9 [61]	37.3 [60]
Accelerator Pedal, % Full (%)	16.0	23.0	23.5	23.5	22.5	20.0	20.0	20.5	21.5	25.0	73.5
Percentage of Engine Throttle	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid	Invalid
Engine RPM (RPM)	900	500	100	500	1,000	900	1,000	1,000	1,000	1,100	1,200
Motor RPM (RPM)	4,600	4,600	4,600	4,600	4,600	4,500	4,500	4,500	4,500	4,500	4,500
Service Brake, ON/OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Brake Oil Pressure (Mpa)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Longitudinal Acceleration ,	-0.144	-0.502	-0.215	0.072	-0.072	-0.359	-0.072	-0.359	-0.144	0.718	-1.651
Yaw Rate (deg/sec)	-3.90	-4.88	-4.88	-4.39	-3.90	-2.93	-2.44	-3.42	-0.98	-0.49	-10.74
Steering Input (degrees)	-9	-12	-12	-12	-9	-6	-6	-6	0	0	-27
Shift Position	D	D	D	D	D	D	D	D	D	D	D
Sequential Shift Range	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined
Cruise Control Status	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, PWR	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, ECO	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, Sport	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, Snow	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Drive Mode, EV	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

Hexadecimal Data

Data that the vehicle manufacturer has specified for data retrieval is shown in the hexadecimal data section of the CDR report. The hexadecimal data section of the CDR report may contain data that is not translated by the CDR program. The control module contains additional data that is not retrievable by the CDR system.

PIDs	PID	Data
	00	AC 60 00 01
	01	00
	03	30 32 43 33 30 30 30 30 41 44 30 30 30 41 44 30 30 30 39 33 30 30 30 39 33 30 30 30 39 44 30 30 30 39 44
	05	01
	06	17
	0A	01
	0B	00
	20	80 00 00 01
	21	03 9F
	40	00 00 00 01
	60	FF FF F0 01
	61	03 02 04 00 08 80 05 00 00 00 00 00 03 55 03 55 00 00 00 00 05 00 05 00 00 00 00 00 00 00 00 C0 00
	62	A5 01 3F FD 1F F5 00 00 00 00
	63	55 1C 1F EF 00 00 10 00 11 11 11 11 11 10 3D 3D 3D 3D 3D 3D 3D 3D 3C 3D 3C 20 2E 2F 2F 2D 28 28 29 2B 32 93 00 00 00 09 05 01 05 0A 09 0A 0A 0A 0B 0C 00 00 00 00 00 00
	64	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	65	55 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	66	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	67	55 10 28 00 02 23 23 23 FD FD 55 FD FD 00 23
	68	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	69	00 45 0D 00 00 00 02 00 05 00 0E 00 1E 00 24 00 2D 00 31 00 34 00 35 00 35 00 35 00 36 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 37 00 FD
	6A	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	6B	55 E0 00 00 01 FE FE FE FE 55 03 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	6C	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	6D	00 00 00 00 00 00 00 00 01 03 02 03 02 04 05 09 08 01 00 01 04 0B 00 08 04 00 00 00 00 00 00 00 00 01 02 02 02 03 03 06 08 08 09 07 05 07 06 04 04 05 00 FE
	6E	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	6F	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	70	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	71	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	72	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
	73	00 00 00 00 00 00 00 00 00 00 00 00 FD FC FC FC FD FE FE FE 00 00 F7 F8 F6 F6 F7 F8 FA FB F9 FE FF EA FE F9 FD 01 FF FB FF FB FE 0A E9 FE FE FE FE FE FE FE FE FE FE FE FE 00 00 00
	74	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

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80  00 00 00 01
A0  0C 00 00 01
A5  00 00 00 00 00 00 00 00 00 00 79 79 79 79 79 78 78 78 78 78 78
    FE FE FE FE FE FE FE FE FE FE FE
A6  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
    00 00 00 00 00 00 00 00 00 00 00
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