

PRODUCT ADVISORY NOTICE

KEEPING YOU INFORMED OF PRODUCT CHANGES

To: All Customers, Sales Representatives and Distributors

Date: September 20, 2022

Subject: Adding Nexperia PMV65XP as an alternative to ONSEMI FDN342

This Product Advisory Notice is to alert you that Grayhill is adding Nexperia PMV65XP as an alternative to ONSEMI FDN342. **Please forward this notification to the appropriate person(s) in your organization.**

Description of Change

Grayhill will be adding Nexperia p/n PMV65XP as an alternative to ONSEMI FDN342, which has been obsolete. Please see below for part comparison.

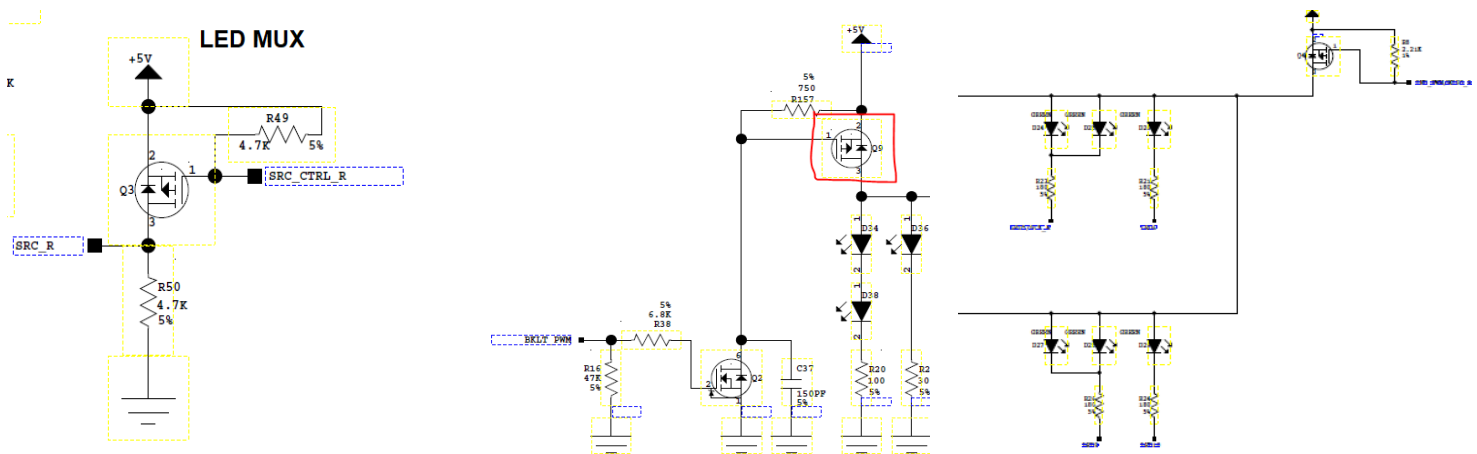
Reason for Change

Onsemi has discontinued their FDN342 product. Grayhill has identified an alternative part that Grayhill will be switching to.

Engineering Comparison

Grayhill Engineering has reviewed the usage of the FDN342. The P channel FET is used in high side lighting applications as shown below.

A 3KG1 20 button keypad with the LED MUX circuit was reworked with the proposed alternate Nexperia PMV65XP. No noticeable differences were observed during the testing.

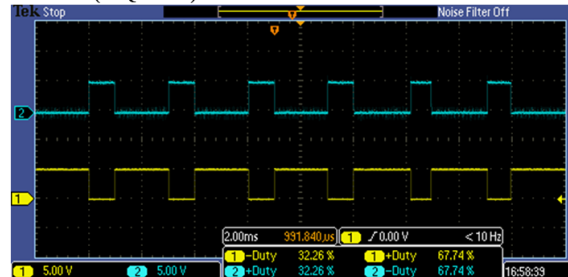


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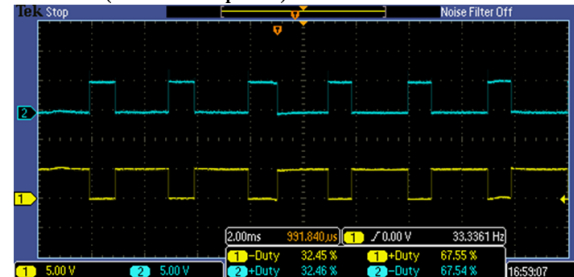
Temperature: 25°C

FDN342P (SEQ3441-1)

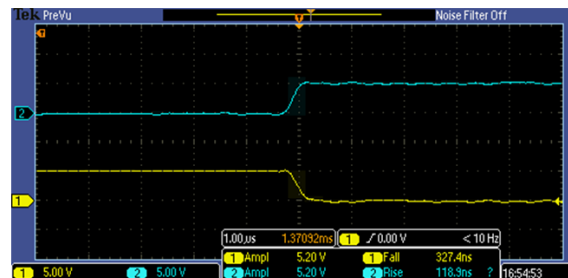


Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

PMV65XP (Alternate component)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



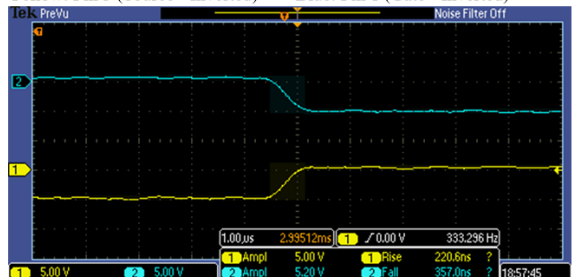
Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



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Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

At room temperature the 2 components behaved exactly the same. Duty cycle was not affected by the component change and the indicators located on the units continue to illuminate with the same intensity. At max brightness and all LEDs turned on, there was no visible difference between the 2 units.

The duty cycle at both the gate and source pin looks the same between the components.

When switching gate input from low to high, the 2 components show identical behavior.

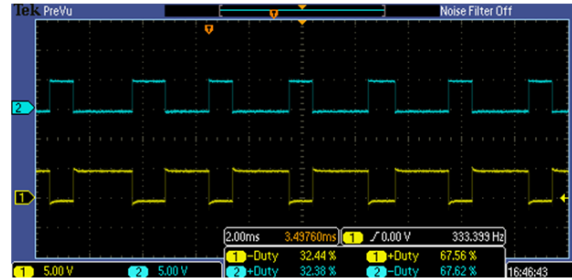
When switching gate input from high to low, the 2 components show identical behavior.

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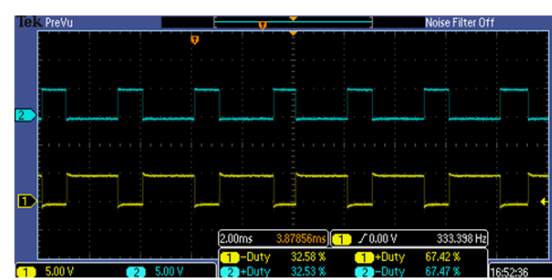
Temperature: -40°C

FDN342P (SEQ3441-1)

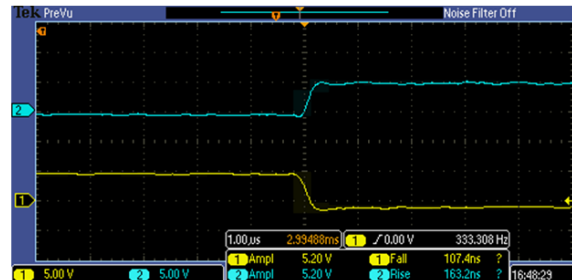


Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

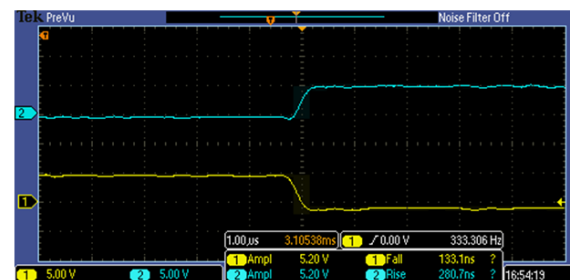
PMV65XP (Alternate component)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



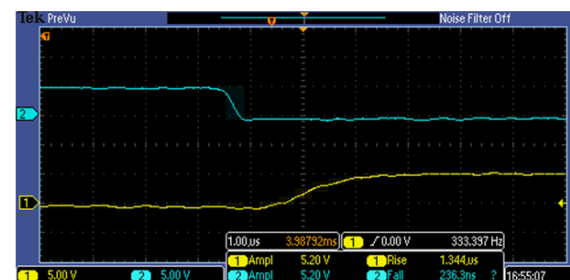
Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

At -40°C the 2 components behaved exactly the same. Duty cycle was not affected by the component change and the indicators located on the units continue to illuminate with the same intensity. At max brightness and all LEDs turned on, there was no visible difference between the 2 units.

The duty cycle at both the gate and source pin looks the same between the components.

When switching gate input from low to high, the 2 components show identical behavior.

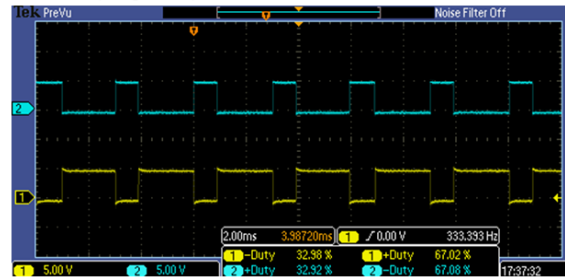
When switching gate input from high to low, at lower temperatures the source state takes longer to toggle for FDN342P compared to the alternate PMV65XP which takes half the time to switch between the 2 states.

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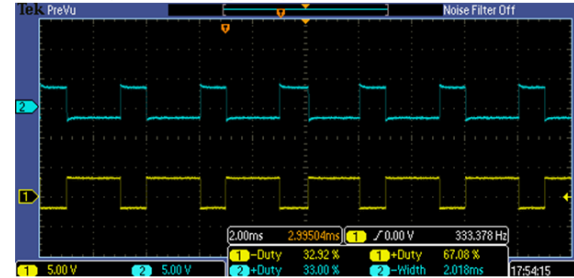
Temperature: 85°C

FDN342P (SEQ3441-1)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

PMV65XP (Alternate component)



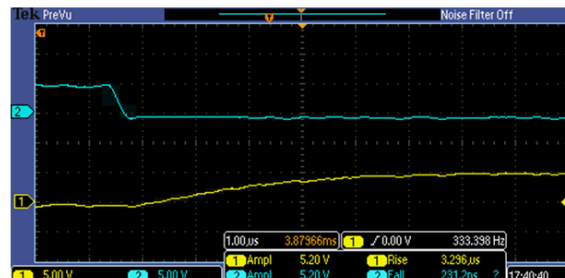
Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



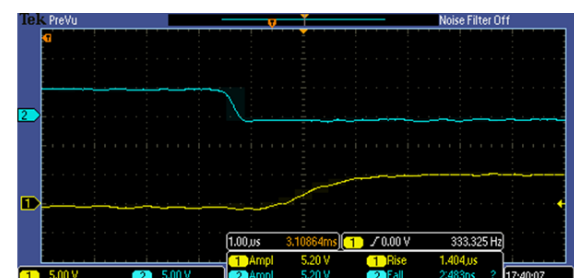
Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)



Yellow: Pin 3 (Source - Inverted) Blue: Pin 1 (Gate - Inverted)

At +85°C the 2 components behaved exactly the same. Duty cycle was not affected by the component change and the indicators located on the units continue to illuminate with the same intensity. At max brightness and all LEDs turned on, there was no visible difference between the 2 units.

The duty cycle at both the gate and source pin looks the same between the components.

When switching gate input from low to high, the 2 components show identical behavior.

When switching gate input from high to low, at higher temperatures the source state takes longer to toggle for FDN342P compared to the alternate PMV65XP which takes half the time to switch between the 2 states.

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Effective Date

9/26/2022

Part Numbers Affected

3AYY1092-1	3KYY1108-431N	3KYY1012-124	3KYY1008-410	3KYY1154-118
3DYY1031-1	3KYY1108-682N	3KYY1012-136	3KYY1008-411	3KYY1154-119
3DYY1031-3	3KYY1108-197	3KYY1012-137	3KYY1008-430	3KYY1154-120
3DYY1036-1	3KYY1108-225	3KYY1012-195	3KYY1008-432	3KYY1154-121
3DYY1031-2	3KYY1108-226	3KYY1012-196	3KYY1008-433	3KYY1154-125
3DYY1034-1	3KYY1108-229	3KYY1012-339	3KYY1008-539	3KYY1154-407
3JYY1025-1	3KYY1108-233	3KYY1012-210	3KYY1008-458	3KYY1154-410R
3JYY1025-2	3KYY1108-234	3KYY1012-220	3KYY1008-461	3KYY1154-411R
3JYY1024-1	3KYY1108-235	3KYY1012-221	3KYY1008-462	3KYY1154-415
3JYY1024-4	3KYY1108-237	3KYY1012-609	3KYY1008-475	3KYY1154-416
3JYY1024-5	3KYY1108-287	3KYY1012-222	3KYY1008-475-2	3KYY1154-422
3JYY1028-1	3KYY1108-304	3KYY1012-580	3KYY1008-480	3KYY1154-423
3JYY1028-2	3KYY1108-305	3KYY1012-248N	3KYY1008-561N	3KYY1154-424
3JYY1028-3	3KYY1108-306	3KYY1012-249N	3KYY1008-562N	3KYY1155-004R
3JYY1028-4	3KYY1108-315	3KYY1012-251	3KYY1008-585	3KYY1155-005
3JYY1028-5	3KYY1108-328	3KYY1012-252	3KYY1008-586	3KYY1155-008R
3JYY1028-6	3KYY1108-346	3KYY1012-258	3KYY1008-694	3KYY1155-013
3JYY1028-7	3KYY1108-347	3KYY1012-259	3KYY1008-593	3KYY1155-014
3KYY1115-107	3KYY1108-348	3KYY1012-260	3KYY1008-593N	3KYY1155-015
3KYY1115-108	3KYY1108-356	3KYY1012-262	3KYY1008-848-1	3KYY1155-019R
3KYY1115-109	3KYY1108-357	3KYY1012-283	3KYY1008-610	3KYY1155-101
3KYY1115-118	3KYY1108-358	3KYY1012-292N	3KYY1008-611	3KYY1155-102
3KYY1115-131	3KYY1108-359	3KYY1012-295N	3KYY1008-612	3KYY1155-109
3KYY1115-208	3KYY1108-360	3KYY1012-307N	3KYY1008-642	3KYY1155-112
3KYY1115-209	3KYY1108-361	3KYY1012-308N	3KYY1008-660	3KYY1155-120
3KYY1115-214	3KYY1108-362	3KYY1012-831	3KYY1008-673	3KYY1155-203
3KYY1115-215	3KYY1108-363	3KYY1012-364	3KYY1008-673-2	3KYY1155-210
3KYY1115-246	3KYY1108-369	3KYY1012-368	3KYY1008-674	3KYY1155-211
3KYY1115-255	3KYY1108-372	3KYY1012-469	3KYY1008-675	3KYY1106-366
3KYY1115-265	3KYY1108-377	3KYY1012-381N	3KYY1008-677	3KYY1106-415
3KYY1115-267	3KYY1108-389	3KYY1012-381N-2	3KYY1008-678	3KYY1106-444N
3KYY1115-277	3KYY1108-554	3KYY1012-425	3KYY1008-679	3KYY1106-477
3KYY1115-294	3KYY1108-391	3KYY1012-426	3KYY1008-713	3KYY1106-575
3KYY1115-311	3KYY1108-392	3KYY1012-427	3KYY1008-714	3KYY1106-638
3KYY1115-312	3KYY1108-395	3KYY1012-442	3KYY1008-715	3KYY1106-795
3KYY1115-316N	3KYY1108-396	3KYY1012-459N	3KYY1008-737	3KYY1106-838-1
3KYY1115-323	3KYY1108-397	3KYY1012-460N	3KYY1008-781	3KYY1106-838-2
3KYY1115-324	3KYY1108-398	3KYY1012-468	3KYY1008-790-13	3KYY1106-851-2N
3KYY1115-325	3KYY1108-399	3KYY1012-527	3KYY1008-790-4	3KYY1106-851N
3KYY1115-376	3KYY1108-400	3KYY1012-540	3KYY1008-784-1	3KYY1106-268
3KYY1115-419	3KYY1108-401	3KYY1012-541N	3KYY1008-784-2	3KYY1106-303
3KYY1115-467	3KYY1108-402	3KYY1012-547	3KYY1008-784-3	3KYY1106-340



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3KYY1115-536	3KYY1108-417	3KYY1012-559N	3KYY1008-784-4	3KYY1106-341
3KYY1115-563	3KYY1108-418	3KYY1012-601N	3KYY1008-784-5	3KYY1106-342
3KYY1115-571	3KYY1108-443	3KYY1012-602N	3KYY1008-784-6	3KYY1106-345
3KYY1115-683	3KYY1108-429	3KYY1012-578N	3KYY1008-790-3	3KYY1106-345-2
3KYY1115-743N	3KYY1108-472	3KYY1012-806N	3KYY1008-790-6	3KYY1106-365
3KYY1115-744N	3KYY1108-495	3KYY1012-626	3KYY1008-790-2	3KYY1106-386
3KYY1115-745N	3KYY1108-496	3KYY1012-627	3KYY1008-790-7	3KYY1106-413
3KYY1115-746N	3KYY1108-497	3KYY1012-640	3KYY1008-790-8	3KYY1106-434
3KYY1115-747N	3KYY1108-498	3KYY1012-641	3KYY1008-799	3KYY1106-435
3KYY1115-771N	3KYY1108-499	3KXX1012-643	3KYY1008-802	3KYY1106-438N
3KYY1115-789-1	3KYY1108-500	3KYY1012-643	3KYY1008-846	3KYY1106-463
3KYY1115-789-2	3KYY1108-501	3KXX1012-649	3KYY1008-846-2	3KYY1106-464
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3KYY1115-816	3KYY1108-519	3KXX1012-650	3KYY1120-125	3KYY1106-555
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3KYY1115-194	3KYY1108-573	3KYY1012-752	3KYY1120-198	3KYY1106-623
3KYY1115-204	3KYY1108-576	3KYY1012-772-1	3KYY1120-199	3KYY1106-624
3KYY1115-261N	3KYY1108-662	3KYY1012-772-2	3KYY1120-227	3KYY1106-661
3KYY1115-320	3KYY1108-663	3KYY1012-772-3	3KYY1120-228	3KYY1106-700
3KYY1115-406	3KYY1108-790-10	3KYY1012-772-4	3KYY1120-250	3KYY1106-701
3KYY1115-408	3KYY1108-790-9	3KYY1012-790	3KYY1120-250N	3KYY1106-801
3KYY1115-428	3KYY1108-779N	3KYY1012-805-1	3KYY1120-336	3KYY1106-801-2
3KYY1115-457	3KYY1108-832	3KYY1012-805-2	3KYY1120-379N	3KYY1106-729
3KYY1115-560	3KYY1012-115	3KYY1012-817	3KYY1120-463	3KYY1106-736N
3KYY1115-628	3KYY1012-116	3KYY1008-103	3KYY1120-464	3KYY1106-763
3KYY1115-629	3KYY1012-117	3KYY1008-139	3KYY1120-471N	3KYY1106-790-12
3KYY1115-778N	3KYY1012-132	3KYY1008-149	3KYY1120-552	3KYY1106-790-14
3KYY1115-805-3	3KYY1012-135	3KYY1008-150	3KYY1120-792-1	3KYY1106-790-15
3KYY1115-818	3KYY1012-142	3KYY1008-151	3KYY1120-792-2	3KYY1106-804
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3KYY1108-144	3KYY1012-183	3KYY1008-164	3KYY1003-1	3KYY1162-110
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3KYY1108-148	3KYY1012-241	3KYY1008-2	3KYY1003-5	3KYY1162-115
3KYY1108-153	3KYY1012-243	3KYY1008-206	3KYY1120-130	3KYY1162-401
3KYY1108-162	3KYY1012-244	3KYY1008-253	3KYY1120-165	3KYY1162-402
3KYY1108-163	3KYY1012-245	3KYY1008-256	3KYY1120-170	3KYY1162-404
3KYY1108-178	3KYY1012-263	3KYY1008-264	3KYY1120-202	3KYY1162-405
3KYY1108-184	3KYY1012-273	3KYY1008-269	3KYY1120-203	3KYY1162-406
3KYY1108-193	3KYY1012-278	3KYY1008-270	3KYY1120-231	3KYY1162-408



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3KYY1108-2	3KYY1012-281	3KYY1008-271	3KYY1120-275N	3KYY1162-409
3KYY1108-205	3KYY1012-282	3KYY1008-272	3KYY1120-298N	3KYY1162-413
3KYY1108-207	3KYY1012-284	3KYY1008-280	3KYY1120-314	3KYY1162-417
3KYY1108-232	3KYY1012-285	3KYY1008-288	3KYY1120-319	3KYY1162-419
3KYY1108-236	3KYY1012-286N	3KYY1008-302	3KYY1120-343	3KYY1162-418
3KYY1108-247	3KYY1012-300	3KYY1008-337	3KYY1120-452	3KYY1162-420
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3KYY1108-274	3KYY1012-317	3KYY1008-630	3KYY1120-622N	3KYY1161-102
3KYY1108-279	3KYY1012-321	3KYY1008-732	3KYY1120-557N	3KYY1161-103
3KYY1108-289	3KYY1012-370N	3KYY1008-775	3KYY1120-558N	3KYY1161-104
3KYY1108-326N	3KYY1012-371N	3KYY1008-776	3KYY1120-570	3KYY1161-105
3KYY1108-327N	3KYY1012-387	3KYY1008-823	3KYY1120-592	3KYY1161-106
3KYY1108-375	3KYY1012-388	3KYY1008-11	3KYY1120-592N	3KYY1161-108
3KYY1108-380N	3KYY1012-414	3KYY1008-101	3KYY1120-731	3KYY1161-110
3KYY1108-382	3KYY1012-420	3KYY1008-138	3KYY1120-770	3KYY1161-111
3KYY1108-383	3KYY1012-453	3KYY1008-161	3KYY1120-791N	3KYY1161-209
3KYY1108-384	3KYY1012-465	3KYY1008-211	3KYY1129-002	3KYY1170-1
3KYY1108-385	3KYY1012-476N	3KYY1008-212	3KYY1129-003	3KYY1179-1
3KYY1108-534	3KYY1012-515	3KYY1008-223	3KYY1129-1	3KYY1184-0
3KYY1108-535	3KYY1012-517	3KYY1008-224	3KYY1129-001	3KYY1184-5
3KYY1108-538	3KYY1012-550	3KYY1008-238	3KYY1129-201	3KYY1184-6
3KYY1108-546N	3KYY1012-551	3KYY1008-291	3KYY1129-202	3KYY1184-7
3KYY1108-553	3KYY1012-653	3KYY1008-293N	3KYY1129-203	3KYY1184-8
3KYY1108-556	3KYY1012-733	3KYY1008-299	3KYY1129-204	3KYY1184-9
3KYY1108-566	3KYY1012-774	3KYY1008-329	3KYY1133-1	3KYY1184-10
3KYY1108-567	3KYY1012-793	3KYY1008-330	3KYY1133-2	3KYY1184-20
3KYY1108-577-1	3KYY1012-800	3KYY1008-331	93YY5243-116	3KYY1184-11
3KYY1108-577-2	3KYY1012-810	3KYY1008-332	93YY5243-226	3KYY1184-12
3KYY1108-577-3	3KYY1012-812N	3KYY1008-333	3KYY1008-174	3KYY1184-13
3KYY1108-577-4	3KYY1012-820	3KYY1008-338	3KYY1008-549	3KYY1184-14
3KYY1108-577-5	3KYY1012-842N	3KYY1008-349	3KYY1012-175	3KYY1184-15
3KYY1108-577-6	3KYY1012-357	3KYY1008-349-2	3KYY1012-466	3KYY1184-16
3KYY1108-577-7	3KXX1012-373	3KYY1008-350	3KYY1012-470	3KYY1184-17
3KYY1108-577-8	3KYY1012-373	3KYY1008-350-2	3KYY1012-639	3KYY1184-18
3KYY1108-644	3KXX1012-374	3KYY1008-351	3KYY1012-572	3KYY1184-19
3KYY1108-645	3KYY1012-374	3KYY1008-351-2	3KYY1120-809	93YY5374-1
3KYY1108-782	3KXX1012-671	3KYY1008-352	3KYY1144-3	93YY5374-3
3KYY1108-833N	3KYY1012-671	3KYY1008-819	3KYY1144-2	93YY5374-4
3KYY1108-587	3KYY1012-007	3KYY1008-353	3KYY1144-1	93YY5378-1
3KYY1172-1	3KYY1012-008	3KYY1008-353-2	3KYY1154-103	3KYY1008-291
3KYY1172-2	3KYY1012-009	3KYY1008-354	3KYY1154-104	3KYY1008-333
3KYY1172-3	3KYY1012-010	3KYY1008-354-2	3KYY1154-106	93YY5293-1
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3KYY1108-297	3KYY1012-102	3KYY1008-355-2	3KYY1154-109	3KYY1162-402
3KYY1108-403	3KYY1012-122	3KYY1008-355-3	3KYY1154-112	3KYY1162-404
3KYY1108-404	3KYY1012-318	3KYY1008-378	3KYY1154-113	3KYY1161-101



PRODUCT ADVISORY NOTICE

KEEPING YOU INFORMED OF PRODUCT CHANGES

3KYY1108-191	3KYY1012-335	3KYY1008-394	3KYY1154-114	
3KYY1108-191N	3KYY1012-123	3KYY1008-409	3KYY1154-117	

Actions Required

None

