

F99 - Optoelectronics

WSTS Semiconductor Forecast

F99 - Optoelectronics

Optoelectronics	2015	2016	2017			2017		2018				2018	2019	2020
Code F99	Total	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Total	Total
Amer - \$M	4532.4	4496.7	1227.1	1239.4	1738.8	1784.8	5990.1	1616.3	1632.2	1739.8	1773.7	6762.0	7217.9	7687.9
3/3 % \$	16.7	-0.8	-17.1	1.0	40.3	2.6	33.2	-9.4	1.0	6.6	1.9	12.9	6.7	6.5
% of World	13.6	14.1	14.9	14.9	19.6	19.7	17.4	17.9	17.9	18.4	18.4	18.1	18.5	18.9
Europe - \$M	2575.4	2510.6	672.5	752.9	728.7	742.2	2896.3	737.8	753.2	768.6	784.6	3044.2	3174.1	3272.9
3/3 % \$	22.7	-2.5	5.2	12.0	-3.2	1.9	15.4	-0.6	2.1	2.0	2.1	5.1	4.3	3.1
% of World	7.7	7.8	8.2	9.1	8.2	8.2	8.4	8.1	8.2	8.1	8.1	8.2	8.1	8.0
Japan - \$M	7130.2	5750.2	1544.2	1423.8	1403.3	1435.7	5807.0	1447.4	1441.8	1490.3	1518.2	5897.7	6113.1	6302.9
3/3 % \$	3.5	-19.4	12.4	-7.8	-1.4	2.3	1.0	0.8	-0.4	3.4	1.9	1.6	3.7	3.1
% of World	21.4	18.0	18.8	17.2	15.8	15.8	16.8	16.0	15.8	15.7	15.7	15.8	15.6	15.5
JPN - ¥100M	8631.2	6278.8	1756.8	1581.6	1556.6	1592.5	6487.5	1605.5	1599.3	1653.1	1684.0	6541.9	6780.8	6991.3
3/3 % ¥	18.6	-27.3	17.4	-10.0	-1.6	2.3	3.3	0.8	-0.4	3.4	1.9	0.8	3.7	3.1
Asia Pac - \$M	19017.6	19237.0	4773.4	4881.7	4998.3	5119.8	19773.2	5250.9	5316.5	5464.1	5566.4	21597.9	22573.6	23444.1
3/3 % \$	11.9	1.2	-4.2	2.3	2.4	2.4	2.8	2.6	1.2	2.8	1.9	9.2	4.5	3.9
% of World	57.2	60.1	58.1	58.8	56.4	56.4	57.4	58.0	58.1	57.7	57.7	57.9	57.8	57.6
World - \$M	33255.5	31994.4	8217.2	8297.8	8869.1	9082.6	34466.7	9052.3	9143.7	9462.8	9642.9	37301.8	39078.6	40707.8
3/3 % \$	11.3	-3.8	-3.0	1.0	6.9	2.4	7.7	-0.3	1.0	3.5	1.9	8.2	4.8	4.2
F1 - Display	556.6	408.6	77.9	81.4	87.7	106.1	353.1	92.3	93.7	96.7	97.1	379.8	395.6	413.3
3/3 % \$	-4.3	-26.6	-5.7	4.5	7.7	21.1	-13.6	-13.0	1.5	3.1	0.4	7.6	4.2	4.5
F2 - Lamp	12864.2	11820.5	2907.9	3005.7	2957.4	2948.6	11819.5	2989.7	3073.1	3078.1	3088.4	12229.3	12483.7	12644.1
3/3 % \$	11.1	-8.1	0.1	3.4	-1.6	-0.3	0.0	1.4	2.8	0.2	0.3	3.5	2.1	1.3
F3 - Coupler	1476.0	1379.4	352.9	383.2	395.0	379.2	1510.3	389.6	405.4	413.3	401.2	1609.5	1679.8	1745.3
3/3 % \$	4.0	-6.5	-3.2	8.6	3.1	-4.0	9.5	2.8	4.0	1.9	-2.9	6.6	4.4	3.9
F5 - Image_Sensor	11289.0	11934.0	3271.5	3123.4	3621.5	3816.9	13833.3	3766.9	3715.1	3955.7	4117.4	15555.1	16635.2	17688.4
3/3 % \$	4.7	5.7	-9.5	-4.5	15.9	5.4	15.9	-1.3	-1.4	6.5	4.1	12.4	6.9	6.3
F6 - Oth_Opto	4251.1	3303.7	811.7	827.2	898.3	923.7	3461.0	900.9	911.1	936.9	953.0	3701.8	3822.9	3930.0
3/3 % \$	51.5	-22.3	12.5	1.9	8.6	2.8	4.8	-2.5	1.1	2.8	1.7	7.0	3.3	2.8
F71 - Light Sensors	977.8	1319.4	340.7	379.2	395.4	402.4	1517.6	408.9	420.1	437.4	438.1	1704.5	1824.9	1932.8
3/3 % \$	11.1	34.9	-1.5	11.3	4.3	1.8	15.0	1.6	2.7	4.1	0.2	12.3	7.1	5.9
F8 - Lsr_Pickup	523.6	464.2	101.8	102.4	89.1	84.5	377.9	85.1	86.9	88.5	88.5	349.0	340.0	333.3
3/3 % \$	8.4	-11.3	-1.1	0.6	-12.9	-5.2	-18.6	0.6	2.2	1.9	-0.1	-7.6	-2.6	-2.0
F9 - Lsr_Transmitter	1317.3	1364.6	352.7	395.4	424.8	421.0	1594.0	418.8	438.4	456.2	459.3	1772.8	1896.5	2020.5
3/3 % \$	-0.9	3.6	4.2	12.1	7.4	-0.9	16.8	-0.5	4.7	4.1	0.7	11.2	7.0	6.5
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

P4 - MOS DSP

WSTS Semiconductor Forecast

P4 - MOS DSP

MOS DSP	2015	2016	2017			2017		2018				2018	2019	2020
Code P4	Total	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Total	Total
Amer - \$M	346.5	452.8	123.0	115.8	143.1	137.9	519.8	138.3	143.4	147.5	141.1	570.3	585.9	599.5
3/3 % \$	10.4	30.6	7.9	-5.9	23.6	-3.6	14.8	0.3	3.7	2.9	-4.4	9.7	2.7	2.3
% of World	13.6	15.8	16.1	14.0	16.7	16.7	15.9	16.1	16.1	16.1	16.1	16.1	16.4	16.4
Europe - \$M	788.3	920.9	261.1	293.7	314.4	303.1	1172.2	316.2	327.8	337.3	322.5	1303.8	1335.6	1367.1
3/3 % \$	-11.0	16.8	17.9	12.5	7.0	-3.6	27.3	4.3	3.7	2.9	-4.4	11.2	2.4	2.4
% of World	30.9	32.1	34.3	35.6	36.6	36.6	35.8	36.8	36.8	36.8	36.8	36.8	37.5	37.5
Japan - \$M	236.8	256.2	58.5	61.6	61.8	59.6	241.4	62.1	64.4	66.3	63.4	256.2	253.0	258.8
3/3 % \$	-4.4	8.2	-7.4	5.3	0.3	-3.6	-5.7	4.3	3.7	2.9	-4.4	6.1	-1.3	2.3
% of World	9.3	8.9	7.7	7.5	7.2	7.2	7.4	7.2	7.2	7.2	7.2	7.2	7.1	7.1
JPN - ¥100M	286.7	277.9	66.5	68.4	68.5	66.1	269.6	68.9	71.5	73.5	70.3	284.2	280.6	287.1
3/3 % ¥	9.6	-3.1	-3.4	2.8	0.2	-3.6	-3.0	4.3	3.7	2.9	-4.4	5.4	-1.3	2.3
Asia Pac - \$M	1178.9	1239.4	319.2	354.6	339.9	327.7	1341.5	341.9	354.5	364.8	348.7	1409.8	1391.9	1424.2
3/3 % \$	-7.9	5.1	3.9	11.1	-4.1	-3.6	8.2	4.3	3.7	2.9	-4.4	5.1	-1.3	2.3
% of World	46.2	43.2	41.9	42.9	39.6	39.6	41.0	39.8	39.8	39.8	39.8	39.8	39.0	39.0
World - \$M	2550.6	2869.1	761.8	825.7	859.1	828.3	3274.9	858.4	890.1	915.9	875.7	3540.2	3566.4	3649.6
3/3 % \$	-6.5	12.5	7.9	8.4	4.0	-3.6	14.1	3.6	3.7	2.9	-4.4	8.1	0.7	2.3
P4a - Consumer	623.3	664.8	172.9	204.3	205.7	194.2	777.1	200.3	206.8	212.3	201.9	821.3	790.0	795.0
3/3 % \$	1.0	6.7	13.1	18.2	0.7	-5.6	16.9	3.2	3.2	2.7	-4.9	5.7	-3.8	0.6
P4b - Computer	43.7	14.4	2.3	2.6	2.3	2.2	9.4	2.3	2.4	2.4	2.3	9.4	9.0	8.9
3/3 % \$	-7.6	-67.0	10.8	13.3	-11.0	-5.6	-34.4	3.7	3.4	2.3	-3.5	-0.9	-4.3	-0.4
P4c - Cell_Phone	54.0	53.8	11.1	11.1	9.7	9.1	41.1	9.4	9.8	10.0	9.7	38.9	37.1	37.0
3/3 % \$	-36.8	-0.4	-15.5	0.2	-13.0	-5.6	-23.5	3.0	3.6	2.5	-3.4	-5.5	-4.5	-0.3
P4d - Infrastructure	184.9	175.3	53.8	46.1	54.9	53.5	208.4	54.5	57.3	59.7	57.6	229.1	229.8	232.3
3/3 % \$	-59.5	-5.2	22.2	-14.3	19.0	-2.6	18.9	1.8	5.2	4.1	-3.4	9.9	0.3	1.1
P4g - Wired_Comm	46.0	31.3	5.3	4.0	4.9	4.6	18.8	4.7	4.9	5.0	4.9	19.6	18.7	18.7
3/3 % \$	-33.9	-32.0	-25.7	-23.7	21.2	-5.6	-39.8	2.8	3.6	2.5	-3.4	3.9	-4.8	0.3
P4h - Automotive	734.2	950.9	263.8	277.0	311.9	310.1	1162.8	324.6	337.8	348.1	334.7	1345.3	1446.1	1515.6
3/3 % \$	30.3	29.5	9.4	5.0	12.6	-0.6	22.3	4.7	4.1	3.1	-3.9	15.7	7.5	4.8
P4i - Multipurpose	864.6	978.7	252.6	280.4	269.7	254.6	1057.2	262.6	271.1	278.3	264.6	1076.7	1035.7	1042.2
3/3 % \$	-2.4	13.2	2.9	11.0	-3.8	-5.6	8.0	3.2	3.2	2.7	-4.9	1.8	-3.8	0.6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

