

**U.S. ATLAS
1.1 Silicon ETC 02
WBS 1.1.1 Pixels Schedule**

ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002			2003			2004			2005			200					
							1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
1	1.1.1	US ATLAS Pixel Project	1696 d	Fri 10/1/99	Mon 4/3/06		[Gantt bar]																	
2	1.1.1.1	Mechanics	1435 d	Mon 10/2/00	Mon 4/3/06		[Gantt bar]																	
3	1.1.1.1.1	Design	1185 d	Mon 10/2/00	Fri 4/15/05		[Gantt bar]																	
4		Mechanics Engineering FY01 \$s	260 d	Mon 10/2/00	Fri 9/28/01		UNM EE PRJ[42%],UNM TR PRJ[0%],L																	
5		Mechanics Engineering FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02		[Gantt bar] LBLj DS PRJ[42%],LBLj ME P																	
6		Mechanics Engineering FY03 \$s	261 d	Tue 10/1/02	Tue 9/30/03		[Gantt bar] LBLj DS PRJ[42%],L																	
7		Mechanics Engineering FY04 \$s	262 d	Wed 10/1/03	Thu 9/30/04		[Gantt bar] LBLj DS PRJ																	
8		Mechanics Engineering FY05 \$s	141 d	Fri 10/1/04	Fri 4/15/05		[Gantt bar] LBLs TR																	
9		Release bids for global support	0 d	Tue 2/26/02	Tue 2/26/02	11	◆ 2/26																	
10		Bid evaluation complete for support	0 d	Mon 3/25/02	Mon 3/25/02	9FS+20 d	◆ 3/25																	
11		Global Support PRR	0 d	Tue 2/26/02	Tue 2/26/02		◆ 2/26																	
12		ATLAS PM approval of global suppor	0 d	Mon 4/1/02	Mon 4/1/02	10FS+5 d	◆ 4/1																	
13		Support tube FDR	0 d	Mon 6/17/02	Mon 6/17/02		◆ 6/17																	
14		Support tube PRR	0 d	Mon 12/16/02	Mon 12/16/02		◆ 12/16																	
15		Cables/services FDR	0 d	Mon 6/17/02	Mon 6/17/02	13	◆ 6/17																	
16		Release bids for initial cables	0 d	Fri 12/6/02	Fri 12/6/02	17FF-40 d	◆ 12/6																	
17		Bid evaluation complete for outer cat	0 d	Fri 1/31/03	Fri 1/31/03	18FF-10 d	◆ 1/31																	
18		Cables/services PRR	0 d	Mon 2/17/03	Mon 2/17/03		◆ 2/17																	
19		ATLAS PM approval of outer cables	0 d	Fri 2/21/03	Fri 2/21/03	18FS+5 d	◆ 2/21																	
20		Assembly/Installation CDR	0 d	Tue 2/26/02	Tue 2/26/02	11	◆ 2/26																	
21		Assembly/Installation FDR	0 d	Mon 12/16/02	Mon 12/16/02		◆ 12/16																	
22		Assembly/Installation PRR	0 d	Mon 6/16/03	Mon 6/16/03		◆ 6/16																	
23	1.1.1.1.2	Development/Prototypes	707 d	Mon 10/2/00	Tue 6/17/03		[Gantt bar]																	
24		Development/Prototypes FY01 \$s	260 d	Mon 10/2/00	Fri 9/28/01		[Gantt bar] LBLs MT PRJ[11%],LBLs ET PRJ[5%],																	
25		Development/Prototypes FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02		[Gantt bar] LBLs ET PRJ[4%],LBLs SH P																	
26		Development/Prototypes FY03 \$s	186 d	Tue 10/1/02	Tue 6/17/03		[Gantt bar]																	
27		Support tube development/prototype:	240 d	Mon 7/16/01	Mon 6/17/02	13FF	[Gantt bar]																	

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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002			2003			2004			2005			2006					
							1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
28		Support tube development complete	0 d	Mon 6/17/02	Mon 6/17/02	27			◆	6/17														
29		Outer services development/prototyp	400 d	Mon 8/6/01	Mon 2/17/03	18FF																		
30		Compl. Outer services development/	0 d	Mon 2/17/03	Mon 2/17/03	29																		
31	1.1.1.1.3	Production	1233 d	Wed 7/11/01	Mon 4/3/06		◆																	
32		Production FY01 \$\$	58 d	Wed 7/11/01	Fri 9/28/01																			
33		Production FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02																			
34		Production FY03 \$\$	261 d	Tue 10/1/02	Tue 9/30/03																			
35		Production FY04 \$\$	262 d	Wed 10/1/03	Thu 9/30/04																			
36		Production FY05 \$\$	141 d	Fri 10/1/04	Fri 4/15/05																			
37		Disk Sector Fab/Test	260 d	Mon 10/1/01	Fri 9/27/02																			
38		Disk Support Ring Fab/Test	260 d	Mon 10/1/01	Fri 9/27/02																			
39		Support Frame Fab/Test	260 d	Tue 4/9/02	Mon 4/7/03	11FS+30 d																		
40		Support tubes Fab/Test	265 d	Mon 12/16/02	Fri 12/19/03	14																		
41		Outer Services Fab/Test	530 d	Mon 3/31/03	Fri 4/8/05	18FS+30 d																		
42		All Outer Services Complete	0 d	Fri 4/8/05	Fri 4/8/05	41																		
43		Trial Outer Structure Assembly	120 d	Tue 4/8/03	Mon 9/22/03	39																		
44		Outer Structure Complete/Ready for	0 d	Mon 9/22/03	Mon 9/22/03	43																		
45		Outer Structure Needed for Modules	0 d	Thu 4/15/04	Thu 4/15/04	215SS+10 d																		
46		Disk Assembly/Test	180 d	Fri 4/16/04	Thu 12/23/04	215SS+10 d																		
47	Sil L2/9; Sil L3/1	Disk System at CERN	0 d	Thu 1/20/05	Thu 1/20/05	46FS+20 d																		
48		Fab services supports	200 d	Mon 7/14/03	Fri 4/16/04	22FS+20 d																		
49		Trial assembly services supports	45 d	Mon 4/19/04	Fri 6/18/04	48																		
50		Outer System Assembly/Test at CER	110 d	Fri 1/21/05	Thu 6/23/05	47																		
51		Outer System Ready for Installation	0 d	Thu 6/23/05	Thu 6/23/05	50																		
52		ATLAS need date for installation for p	0 d	Thu 2/24/05	Thu 2/24/05																			
53		ATLAS need date for 1st physics run	0 d	Mon 4/3/06	Mon 4/3/06																			
54																								

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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002			2003				2004				2005				200			
							1	2	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
55	1.1.1.2	Sensors	1059 d	Mon 10/2/00	Thu 10/21/04																				
56	1.1.1.2.1	Design	760 d	Mon 10/30/00	Fri 9/26/03																				
57		Sensors Design FY01 \$\$	240 d	Mon 10/30/00	Fri 9/28/01																				
58		Sensors Design FY02 \$\$	80 d	Mon 10/1/01	Fri 1/18/02																				
59		Test Support	520 d	Mon 10/1/01	Fri 9/26/03																				
60		ATLAS PM approval of production p	0 d	Mon 12/17/01	Mon 12/17/01	67SS-15 d	◆ 12/17																		
61		Release initial MC for sensors/testing	0 d	Mon 12/17/01	Mon 12/17/01	60	◆ 12/17																		
62	1.1.1.2.3	Production	1059 d	Mon 10/2/00	Thu 10/21/04																				
63		Sensors Production FY01 \$\$	260 d	Mon 10/2/00	Fri 9/28/01																				
64		Sensors Production FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02																				
65		Sensors Production FY03 \$\$	261 d	Tue 10/1/02	Tue 9/30/03																				
66		Sensors Production FY04 \$\$	3 d	Wed 10/1/03	Fri 10/3/03																				
67		Sensors Production	350 d	Mon 1/7/02	Fri 5/9/03																				
68		First production wafers delivered	0 d	Fri 5/24/02	Fri 5/24/02	67SS+100 d	◆ 5/24																		
69		Sensors Testing	350 d	Mon 5/27/02	Fri 9/26/03	68																			
70		Sensors Testing Complete	0 d	Fri 9/26/03	Fri 9/26/03	69	◆ 9/26																		
71		Sensors Need to Begin Module Prod	0 d	Fri 11/7/03	Fri 11/7/03	129SS	◆ 11/7																		
72		B-Layer Production	125 d	Fri 11/15/02	Thu 5/8/03																				
73		First B-layer wafers delivered	0 d	Thu 4/3/03	Thu 4/3/03	72SS+100 d	◆ 4/3																		
74		B-layer sensor testing	125 d	Fri 4/4/03	Thu 9/25/03	73																			
75		B-layer sensors needed to begin moc	0 d	Thu 10/21/04	Thu 10/21/04	217	◆ 10/21																		
76																									
77	1.1.1.3	Electronics	1320 d	Fri 10/1/99	Thu 10/21/04																				
78	1.1.1.3.1	Design	1155 d	Fri 10/1/99	Thu 3/4/04																				
79		Elec.'s Design FY01 \$\$	260 d	Mon 10/2/00	Fri 9/28/01																				
80		Elec.'s Design FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02																				
81		Elec.'s Design FY03 \$\$	261 d	Tue 10/1/02	Tue 9/30/03																				

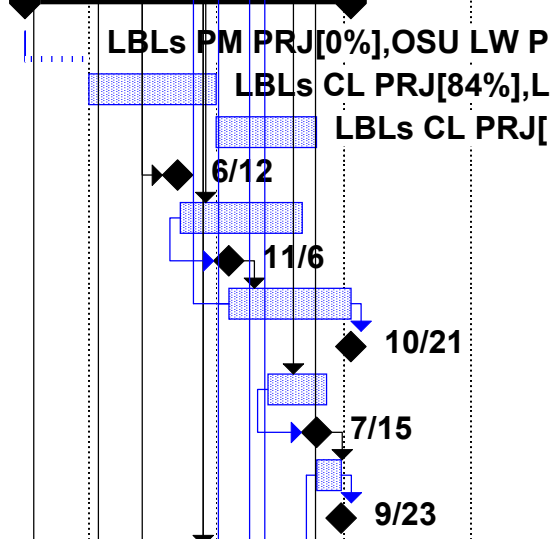
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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002				2003				2004				2005				200		
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
82		Elec.'s Design FY04 \$s	41 d	Wed 10/1/03	Wed 11/26/03																				
83		Outer layers design	633 d	Tue 1/9/01	Thu 6/12/03	90FF																			
84		B-layer design	390 d	Fri 8/30/02	Thu 2/26/04	97FF																			
85		Test design	418 d	Tue 1/9/01	Thu 8/15/02	88FF																			
86		Management contingency decision D	0 d	Fri 10/1/99	Fri 10/1/99																				
87		FE-I2 spec complete	0 d	Thu 7/18/02	Thu 7/18/02	88FF-20 d																			
88		FE-I2 FDR	0 d	Thu 8/15/02	Thu 8/15/02	114																			
89		IBM Production release order effort	60 d	Fri 3/21/03	Thu 6/12/03	90FF																			
90		IBM FE PRR	0 d	Thu 6/12/03	Thu 6/12/03	120																			
91		ATLAS PM approval of IBM procurei	0 d	Thu 6/19/03	Thu 6/19/03	90FS+5 d																			
92		Release initial MC for IBM FE	0 d	Thu 6/19/03	Thu 6/19/03	91																			
93		Release IBM production	0 d	Thu 6/19/03	Thu 6/19/03	92																			
94		B-Layer FDR	0 d	Thu 6/12/03	Thu 6/12/03	90																			
95		Compl. Spec for B-Layer prod order r	0 d	Fri 9/12/03	Fri 9/12/03	96SS-30 d																			
96		Production release order effort	90 d	Fri 10/24/03	Thu 2/26/04	97FF																			
97		B-Layer PRR	0 d	Thu 2/26/04	Thu 2/26/04	129SS+80 d																			
98		ATLAS PM Approval of B-Layer Proc	0 d	Thu 3/4/04	Thu 3/4/04	97FS+5 d																			
99		Release initial MC for B-layer produc	0 d	Thu 3/4/04	Thu 3/4/04	98																			
100		Release B-Layer Production	0 d	Thu 3/4/04	Thu 3/4/04	99																			
101		Optical IC design	633 d	Tue 1/9/01	Thu 6/12/03	90FF																			
102		Optical IC FDR	0 d	Thu 8/15/02	Thu 8/15/02	88																			
103		Optical IC PRR	0 d	Thu 6/12/03	Thu 6/12/03	90																			
104		Release initial MC for optical IC	0 d	Thu 6/19/03	Thu 6/19/03	103FS+5 d																			
105	1.1.1.3.2	Development/Prototypes	724 d	Mon 1/8/01	Thu 10/16/03																				
106		Elec.'s Develop/Protos FY01 \$s	190 d	Mon 1/8/01	Fri 9/28/01																				
107		Elec.'s Develop/Protos FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02																				
108		Elec.'s Develop/Protos FY03 \$s	261 d	Tue 10/1/02	Tue 9/30/03																				

LBLj PM PRJ[0%], LBLs PM PRJ[0%],
LBLs HI PRJ[0%], OSU HI PRJ

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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002			2003				2004				2005				200			
							1	2	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
109		Elec.'s Develop/Protos FY04 \$\$	12 d	Wed 10/1/03	Thu 10/16/03																				
110	Sil L2/6	1st IBM prototype submitted(FE-I1)	0 d	Fri 11/30/01	Fri 11/30/01		◆	11/30																	
111		1st IBM prototype delivered	0 d	Thu 1/31/02	Thu 1/31/02	110FS+45 d	◆	1/31																	
112		Complete initial wafer probe FE-I1	0 d	Thu 2/14/02	Thu 2/14/02	111FS+10 d	◆	2/14																	
113		First bump bonded FE-I1 assemblies	0 d	Thu 4/18/02	Thu 4/18/02	112FS+45 d	◆	4/18																	
114		Complete initial lab/ irradiation tests f	0 d	Thu 8/15/02	Thu 8/15/02	112FS+130 d	◆	8/15																	
115		Beam/system tests of FE-I1 assembl	140 d	Fri 4/19/02	Thu 10/31/02	113																			
116		2nd IBM prototype submitted(FE-I2)	0 d	Thu 9/26/02	Thu 9/26/02	88FS+30 d	◆	9/26																	
117		2nd IBM prototype wafers delivered	0 d	Thu 12/26/02	Thu 12/26/02	116FS+65 d	◆	12/26																	
118		Complete initial wafer probe FE-I2	0 d	Thu 2/6/03	Thu 2/6/03	117FS+30 d	◆	2/6																	
119		First bump bonded FE-I2assemblies	0 d	Thu 3/6/03	Thu 3/6/03	117SS+50 d	◆	3/6																	
120		Complete initial lab/system/ irradiatio	0 d	Thu 6/12/03	Thu 6/12/03	117FS+120 d	◆	6/12																	
121		Beam/system tests of FE-I2 assembl	160 d	Fri 3/7/03	Thu 10/16/03	119																			
122	1.1.1.3.3	Production	669 d	Mon 4/1/02	Thu 10/21/04		▶																		
123		Elec.'s Production FY02 \$\$	131 d	Mon 4/1/02	Mon 9/30/02																				
124		Elec.'s Production FY03 \$\$	261 d	Tue 10/1/02	Tue 9/30/03																				
125		Elec.'s Production FY04 \$\$	206 d	Wed 10/1/03	Wed 7/14/04																				
126	Sil L2/7	Start IBM Production	0 d	Thu 6/12/03	Thu 6/12/03	120																			
127		Outer FE IBM Production	250 d	Fri 6/20/03	Thu 6/3/04	93																			
128		1st outer IBM wafers arrive	0 d	Thu 11/6/03	Thu 11/6/03	127SS+100 d	◆	11/6																	
129		Test outer FE IBM wafers	250 d	Fri 11/7/03	Thu 10/21/04	128																			
130		Outer IBM FE Testing complete	0 d	Thu 10/21/04	Thu 10/21/04	129																			
131		B-Layer FE Production	120 d	Fri 2/27/04	Thu 8/12/04	97																			
132		1st B-Layer wafers arrive	0 d	Thu 7/15/04	Thu 7/15/04	131SS+100 d	◆	7/15																	
133		Test B-layer wafers	50 d	Fri 7/16/04	Thu 9/23/04	132																			
134		B-Layer testing complete	0 d	Thu 9/23/04	Thu 9/23/04	133																			
135		Optical IC production	100 d	Fri 8/8/03	Thu 12/25/03	103FS+40 d																			



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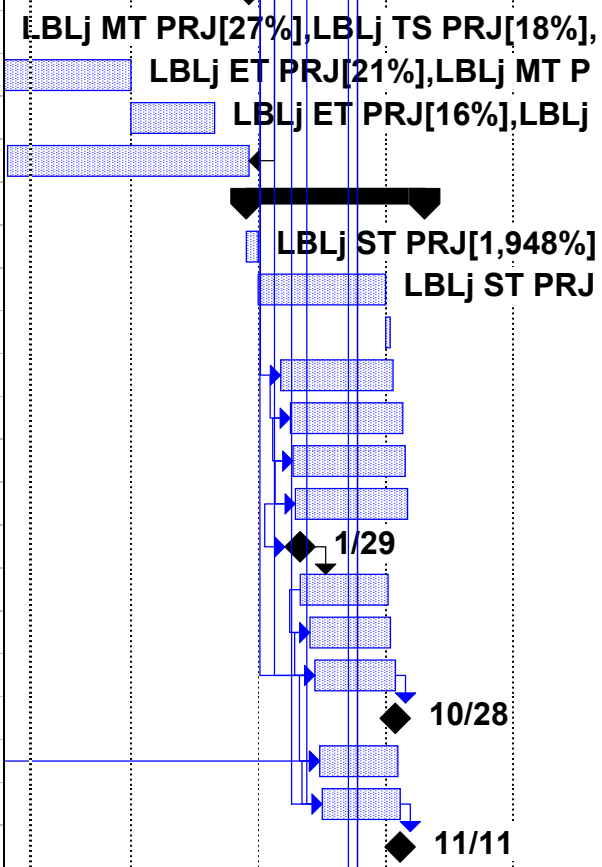
ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002	2003	2004	2005	200							
							1	2	3	4	1	2	3	4	1	2	3	
136		1st Production Optical ICs	0 d	Thu 12/4/03	Thu 12/4/03	135SS+85 d				◆ 12/4								
137		Test optical Ics	60 d	Fri 12/5/03	Thu 2/26/04	136				◆ 2/26								
138		Optical IC testing complete	0 d	Thu 2/26/04	Thu 2/26/04	137												
139																		
140	1.1.1.4	Flex Hybrids/Optical Hybrids	1059 d	Mon 10/2/00	Fri 10/22/04		[Summary Bar]											
141	1.1.1.4.1	Design	714 d	Mon 10/2/00	Thu 6/26/03		[Summary Bar]											
142		Hybrids Design FY01 \$\$	260 d	Mon 10/2/00	Fri 9/28/01		UOK ST PRJ[42%],UOK TR PRJ[0%]											
143		Hybrids Design FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02		LBLs DS PRJ[21%],UOK ST P											
144		Hybrids Design FY03 \$\$	122 d	Tue 10/1/02	Wed 3/19/03		UOK TR PRJ[0%]											
145		Flex Preproduction Design	120 d	Fri 4/26/02	Thu 10/10/02	111FS+60 d												
146		Release Flex Bids	0 d	Thu 8/1/02	Thu 8/1/02	147FF-30 d			◆ 8/1									
147		Flex Bid Evaluation Complete	0 d	Thu 9/12/02	Thu 9/12/02	148FF-20 d			◆ 9/12									
148		Flex Hybrid PRR	0 d	Thu 10/10/02	Thu 10/10/02	145			◆ 10/10									
149		ATLAS PM Approval of Flex Proc	0 d	Thu 10/24/02	Thu 10/24/02	148FS+10 d			◆ 10/24									
150		Release initial MC for flex hybrid and	0 d	Thu 10/24/02	Thu 10/24/02	149			◆ 10/24									
151		Award Flex Contracts	0 d	Thu 11/7/02	Thu 11/7/02	149FS+10 d			◆ 11/7									
152		Optical FDR	0 d	Thu 10/10/02	Thu 10/10/02	148			◆ 10/10									
153		Optical PRR	0 d	Thu 6/12/03	Thu 6/12/03	103				◆ 6/12								
154		Release initial MC for optical compor	0 d	Thu 6/26/03	Thu 6/26/03	153FS+10 d				◆ 6/26								
155	1.1.1.4.2	Development Prototypes	624 d	Mon 1/8/01	Thu 5/29/03		[Summary Bar]											
156		Hybrids Protos FY01 \$\$	190 d	Mon 1/8/01	Fri 9/28/01		LBLs CL PRJ[7%],LBLs SH PRJ[1%],L											
157		Hybrids Protos FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02		LBLs CL PRJ[5%],LBLs PM P											
158		Hybrids Protos Fy03 \$\$	13 d	Tue 10/1/02	Thu 10/17/02													
159		Flex 3.x,4.x Fab and Test	380 d	Mon 10/1/01	Fri 3/14/03													
160		Initial Flex 3.x4.x tests complete	0 d	Fri 5/10/02	Fri 5/10/02	159SS+160 d			◆ 5/10									
161		2nd Optical Prototype Fab and Test	220 d	Mon 10/1/01	Fri 8/2/02													
162		3rd Optical Prototype Fab and Test	150 d	Fri 11/1/02	Thu 5/29/03	153SS-160 d												

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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002			2003				2004				2005				200		
							1	2	3	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
163	1.1.1.4.3	Production	746 d	Thu 12/13/01	Fri 10/22/04																			
164		Hybrids Production FY02 \$s	208 d	Thu 12/13/01	Mon 9/30/02																			
165		Hybrids Production FY03 \$s	261 d	Tue 10/1/02	Tue 9/30/03																			
166		Hybrids Production FY04 \$s	207 d	Wed 10/1/03	Thu 7/15/04																			
167		Start initial production buy of compon	0 d	Fri 5/10/02	Fri 5/10/02	160																		
168		Outer Flex Hybrid (Pre)Production/Lc	250 d	Fri 11/8/02	Thu 10/23/03	151																		
169		First outer flex delivered	0 d	Thu 2/27/03	Thu 2/27/03	168SS+80 d																		
170		Outer flex testing	250 d	Fri 2/28/03	Thu 2/12/04	169																		
171		First outer flex available for module	0 d	Thu 5/22/03	Thu 5/22/03	169FS+60 d																		
172		Need date for first outer flex	0 d	Fri 2/27/04	Fri 2/27/04	212SS-10 d																		
173		Outer flex testing complete	0 d	Thu 2/12/04	Thu 2/12/04	170																		
174		B-Layer Flex Hybrid (Pre)Production/	90 d	Fri 11/21/03	Thu 3/25/04	173FS-60 d																		
175		First B-Layer flex delivered	0 d	Thu 2/12/04	Thu 2/12/04	174SS+60 d																		
176		First B-Layer flex available for modul	0 d	Thu 5/6/04	Thu 5/6/04	175FS+60 d																		
177		Need date for first B-layer flex	0 d	Fri 10/22/04	Fri 10/22/04	219SS-10 d																		
178		B-Layer flex testing complete	0 d	Thu 3/25/04	Thu 3/25/04	174																		
179		Optical (Pre)Production	190 d	Fri 7/11/03	Thu 4/1/04	153FS+20 d																		
180		First optical boards	0 d	Thu 11/27/03	Thu 11/27/03	179SS+100 d																		
181		Optical production complete	0 d	Thu 4/1/04	Thu 4/1/04	179																		
182																								
183	1.1.1.5	Modules	926 d	Thu 7/5/01	Thu 1/20/05																			
184	1.1.1.5.1	Design	646 d	Thu 7/26/01	Fri 1/16/04																			
185		Modules Design FY01 \$s	47 d	Thu 7/26/01	Fri 9/28/01																			
186		Modules Design FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02																			
187		Modules Design FY03 \$s	212 d	Tue 10/1/02	Wed 7/23/03																			
188		Prototype tooling/assembly design	240 d	Fri 11/9/01	Thu 10/10/02	189FF																		
189		Bare module PRR	0 d	Thu 10/10/02	Thu 10/10/02	88FS+40 d																		

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ID	WBS	Task Name	Duration	Start	Finish	Predecess	2002				2003				2004				2005				200		
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
190		Module assembly FDR	0 d	Thu 10/10/02	Thu 10/10/02	189																			
191		Production tooling/assembly design	138 d	Tue 2/25/03	Thu 9/4/03	192FF																			
192		Module assembly PRR	0 d	Thu 9/4/03	Thu 9/4/03	90FS+60 d																			
193		Release initial MC for FE die sort	0 d	Thu 10/2/03	Thu 10/2/03	192FS+20 d																			
194		Production module tooling complete	0 d	Thu 10/30/03	Thu 10/30/03	192FS+40 d																			
195		Need date for production module too	0 d	Fri 1/16/04	Fri 1/16/04	212SS-40 d																			
196	1.1.1.5.2	Development/Prototypes	566 d	Thu 7/5/01	Thu 9/4/03																				
197		Modules Protos FY01 \$\$	62 d	Thu 7/5/01	Fri 9/28/01																				
198		Modules Protos FY02 \$\$	261 d	Mon 10/1/01	Mon 9/30/02																				
199		Modules Protos FY03 \$\$	172 d	Tue 10/1/02	Wed 5/28/03																				
200		Dummy/prototype module fab/test	495 d	Fri 10/12/01	Thu 9/4/03	192FF																			
201	1.1.1.5.3	Production	366 d	Thu 8/28/03	Thu 1/20/05																				
202		Modules Production FY03 \$\$	24 d	Thu 8/28/03	Tue 9/30/03																				
203		Modules Production FY04 \$\$	262 d	Wed 10/1/03	Thu 9/30/04																				
204		Modules Production FY05 \$\$	9 d	Fri 10/1/04	Wed 10/13/04																				
205		IBM FE Bump Deposition	230 d	Fri 12/5/03	Thu 10/21/04	129SS+20 d																			
206		IBM FE wafer thinning	230 d	Fri 1/2/04	Thu 11/18/04	205SS+20 d																			
207		IBM FE Wafer Dicing	230 d	Fri 1/9/04	Thu 11/25/04	206SS+5 d																			
208		IBM FE Die sort	230 d	Fri 1/16/04	Thu 12/2/04	207SS+5 d																			
209	Sil L2/8	Start IBM outer bare module producti	0 d	Thu 1/29/04	Thu 1/29/04	208SS+10 d																			
210		IBM Outer bare module production	180 d	Fri 1/30/04	Thu 10/7/04	209																			
211		IBM outer bare module testing	165 d	Fri 2/27/04	Thu 10/14/04	210SS+20 d																			
212		IBM outer module assembly/test	165 d	Fri 3/12/04	Thu 10/28/04	211SS+10 d																			
213		Complete testing IBM outer modules	0 d	Thu 10/28/04	Thu 10/28/04	212																			
214		Module attach to disk sectors	160 d	Fri 3/26/04	Thu 11/4/04	212SS+10 d																			
215		Test disk sectors	160 d	Fri 4/2/04	Thu 11/11/04	214SS+5 d																			
216		Complete testing disk sectors	0 d	Thu 11/11/04	Thu 11/11/04	215																			



**U.S. ATLAS
1.1 Silicon ETC 02
WBS 1.1.1 Pixels Schedule**

ID	WBS	Task Name	Duration	Start	Finish	Predecessor	2002			2003			2004			2005			200			
							1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	
217		Start B-Layer bare module productior	0 d	Thu 10/21/04	Thu 10/21/04	133SS+70 d																
218		B-Layer bare module production	55 d	Fri 10/22/04	Thu 1/6/05	217																
219		B-Layer module assembly/test	55 d	Fri 11/5/04	Thu 1/20/05	218SS+10 d																
220		Complete testing B-Layer modules	0 d	Thu 1/20/05	Thu 1/20/05	219																
221																						
222	1.1.1.6	Beam/System Test Support	1305 d	Mon 10/2/00	Fri 9/30/05																	
223		Test Beam Support	780 d	Mon 10/2/00	Fri 9/26/03																	
224		Test Beam Support FY01 \$s	260 d	Mon 10/2/00	Fri 9/28/01		LBLj PM PRJ[0%]															
225		Test Beam Support FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02		LBLj PM PRJ[0%]															
226		Test Beam Support FY03 \$s	259 d	Tue 10/1/02	Fri 9/26/03		LBLj PM PRJ[0%]															
227		System Test Support	1305 d	Mon 10/2/00	Fri 9/30/05																	
228		System Test Support FY01 \$s	260 d	Mon 10/2/00	Fri 9/28/01		LBLj PM PRJ[0%]															
229		System Test Support FY02 \$s	261 d	Mon 10/1/01	Mon 9/30/02		LBLj PM PRJ[0%]															
230		System Test Support FY03 \$s	261 d	Tue 10/1/02	Tue 9/30/03		LBLj PM PRJ[0%]															
231		System Test Support FY04\$s	262 d	Wed 10/1/03	Thu 9/30/04		LBLj PM PRJ															
232		System Test Support FY05 \$s	261 d	Fri 10/1/04	Fri 9/30/05		LBLj															