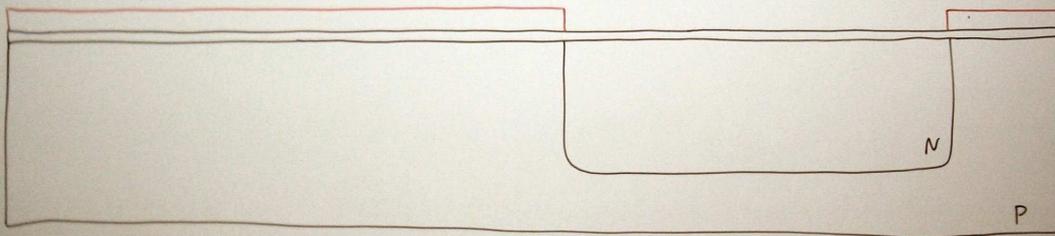


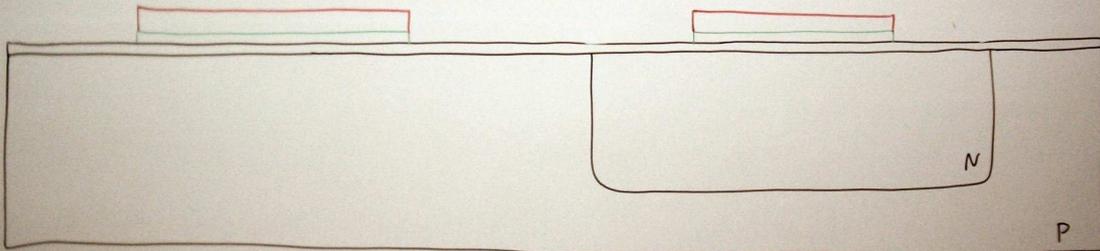
Exemplo de processo CMOS

Gate de silício auto-alinhado, um nível de polisilício, um nível de metal, 10 máscaras.
Antonio Carlos M. de Queiroz – Março de 2010.

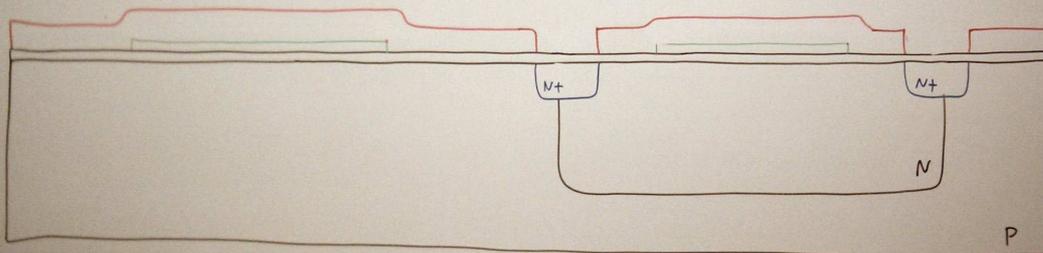
1. LIMPAR WAFER
2. CRESCER ÓXIDO FINO
3. APLICAR FOTORESIST
4. DEFINIR ÁREAS DOS POÇOS N (#1)
5. REVELAR
6. IMPLANTAR POÇO N



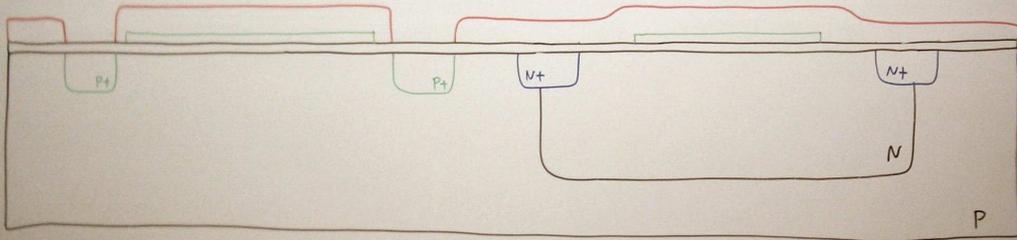
7. REMOVER FOTORESIST
8. REMOVER ÓXIDO FINO
9. CRESCER ÓXIDO FINO
10. APLICAR Si_3N_4
11. APLICAR FOTORESIST
12. DEFINIR ÁREAS ATIVAS (#2)
13. REVELAR
14. REMOVER Si_3N_4



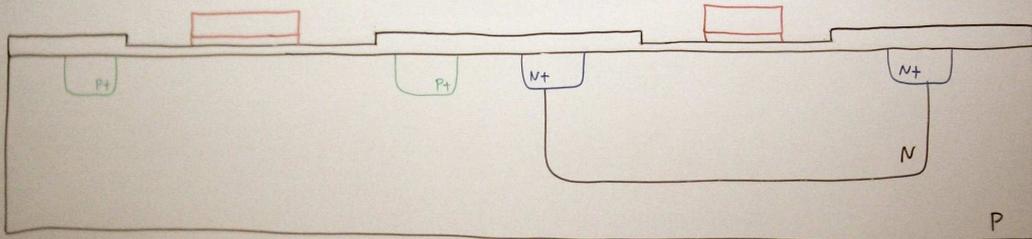
15. REMOVER FOTORESIST
16. APLICAR FOTORESIST
17. DEFINIR ANÉIS DE GUARDA N^+ (#3)
18. REVELAR
19. IMPLANTAR GUARDA N^+



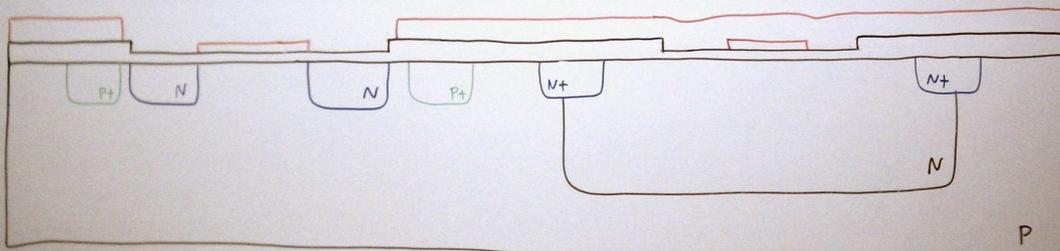
20. REMOVER FOTORESIST 21. APLICAR FOTORESIST 22. DEFINIR ÁREAS DE GUARDA P+ (#4)
 23. REVELAR 24. IMPLANTAR GUARDA P+



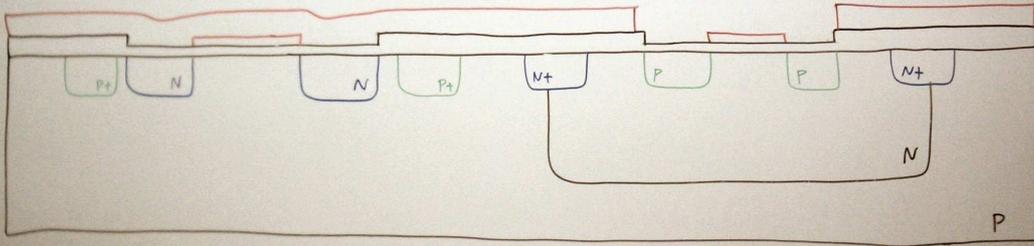
25. REMOVER FOTORESIST 26. CRESCER ÓXIDO GROSSO 27. REMOVER Si_3N_4
 28. REMOVER ÓXIDO FINO 29. CRESCER ÓXIDO DE GATE 30. APLICAR POLY
 31. APLICAR FOTORESIST 32. DEFINIR LINHAS DE POLY (#5) 33. REVELAR
 34. REMOVER POLY



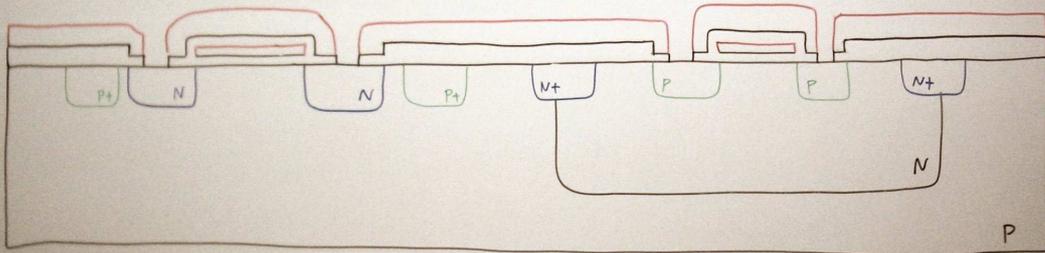
35. REMOVER FOTORESIST 36. APLICAR FOTORESIST 37. DEFINIR ÁREAS DOS TRANSISTORES
 CANAL N (#6) 38. REVELAR 39. IMPLANTAR N+



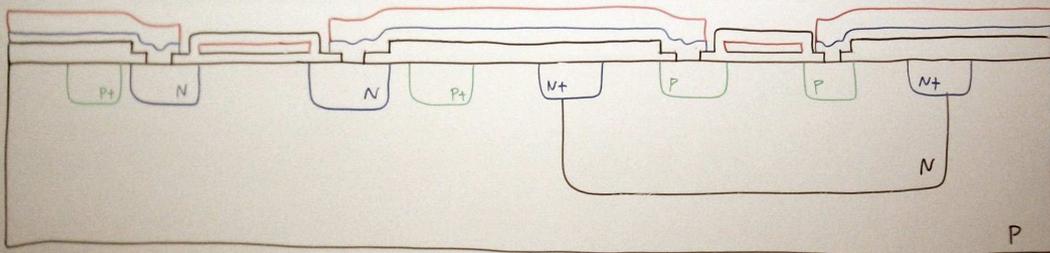
40. REMOVER FOTORESIST 41. APLICAR FOTORESIST 42. DEFINIR ÁREAS DOS TRANSISTORES
 CANAL P (#7) 43. REVELAR 44. IMPLANTAR P



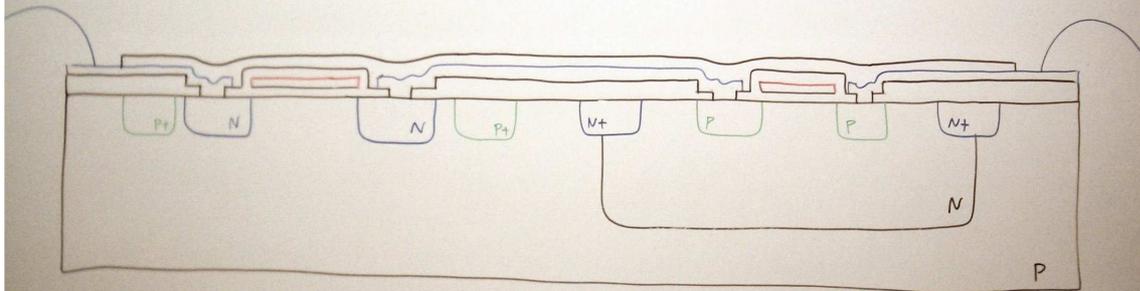
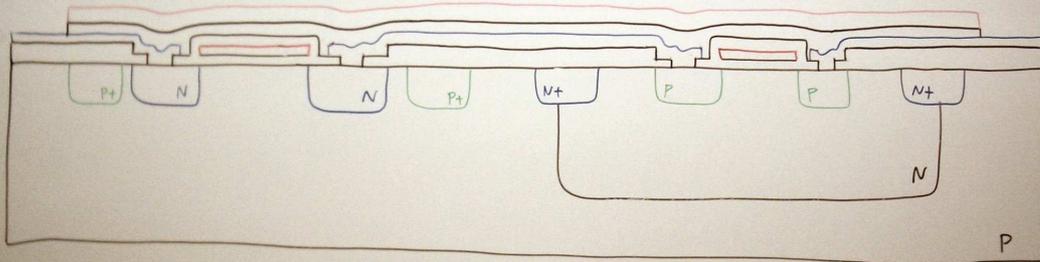
45. REMOVER FOTORESIST 46. REMOVER ÓXIDO FINO 47. CRESCER ÓXIDO
 48. APLICAR FOTORESIST 49. DEFINIR ABERTURAS DE CONTATOS (#8) 50. REVELAR
 51. REMOVER ÓXIDO



52. REMOVER FOTORESIST 53. APLICAR METAL 54. APLICAR FOTORESIST
 55. DEFINIR LINHAS DE METAL (#9) 56. REVELAR 57. REMOVER METAL



58. REMOVER FOTORESIST 59. APLICAR PASSIVAÇÃO 60. APICAR FOTORESIST
61. DEFINIR ABERTURAS DOS PADS (#10) 62. REVELAR 63. REMOVER PASSIVAÇÃO



64. REMOVER FOTORESIST 65. TESTAR, CORTAR, ENCAPSULAR, TESTAR